# ENTERPRISE
# PURPOSE & PROFIT

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*ESSAYS ON INDUSTRY*

BY

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# PREFACE

THE majority of these Essays deal with different aspects of the question that is now called the rationalization of industry. I do not much like this word, but it has become necessary to use it. It is mainly a question of the scale on which private enterprise should be urged or compelled to reorganize itself by amalgamation. But it has some other important aspects which have presented themselves in the stride of the argument.

All these Essays are written within the assumptions of private enterprise. This does not mean any more than that that system is still both important enough and predominant enough to continue to require simple positive study. I think there is a growing tendency to study it with a bias, and that, therefore, we are slipping into a somewhat loose vocabulary about it. The insistent propaganda of another system causes this influence to filter through publicists, who always affect the latest ideas, into the shading of economic writings. The vocabulary is tending to be hedged and speculated in, as if competition and excessive competition, private gain and profiteering, multiple enterprise and chaos, were any more the same thing than are planning and industrial bureaucracy. There is a good deal of the philosophy of the one in the many being hastily applied to industry, and a good deal of bad metaphor is being used for argument. Imputations of motive and purpose are made with insufficient regard to the conditions of special spheres of activity, and an untenable contrast is made between the standards of industry and those which writers belonging to the professions pretend to be their own. With this biassed terminology, private enterprise is scarcely now receiving a quite fair deal. But beyond that, I do not hold any brief for it.

The system of private enterprise is itself at fault till it has applied itself more strenuously to the problem of *industrial*

government. The first and sixth Essays deal with this question, which for periods of time gets submerged, though it belongs inherently to the conduct of industry in a democratic State. Sheer non-cooperation does not bar its consideration. The growth of amalgamation, at least in some fundamental industries, will create units of enterprise of wide enough range to overcome some of the difficulties of the representation of labour interests.

I think also that the rationalization movement is heading for trouble unless it foresees another problem which its success will create, the problem of trade practices. The time will come when we are again interested in the expansion of production rather than, as at present, in its regulation or restriction. All history tells us what happens if powerful amalgamations are set up without provision for the control of trade practice, especially when we have suspended the check of free trade. Publicists will not mind having a new hare to hunt, but economists have to foresee. I have therefore discussed this question, as one of the essential sanctions of the rationalization movement, in the second Essay.

The first and second Essays may be said to deal with some discomforts of the present system. The motive of enterprise is one of these, and that part of the first Essay has been re-written many times without complete elimination of some rather unacademic language. This could not be helped, on this particular issue. The second Essay, by its title and argument, represents another kind of discomfort, but no sensible person can avoid this who reads such Reports as are being issued by the Committees for the reorganization of the cotton, coal, and iron and steel industries. A perfectly direct issue is raised between the experience of industrial leaders in their own spheres, and the legal powers of officials to tell them what to do. The Coal Report especially gives one seriously to think what we are engaged on, with its own observation that the Mining Association petitioned the Government to abolish the Reorganization Committee. How we should

face this question is what I mean by Sanctions of Rationalization.

In the third and fourth Essays I have used new statistics for a historical study of enterprise in relation to the questions of fluctuation and risk. The new ideas depend on the opinion that private enterprise has been excessively costly in both these respects. The materials for these Essays have not, so far as I know, been used by other writers. They are all the salvage which can at present be made from a revision of my *Industrial Combination*, of which the manuscript was accidentally lost.

The later Essays are republished with slight changes from the *Economic Journal*, with the permission of the Editors. That on 'Aspects of Rationalization' aims at putting certain points of view. There is a good amount of psychology involved in these recent industrial tendencies, and under 'points of view' we have to gather up much that cannot be fully treated by methods of analysis. The Essay on 'Mutual Trading' has an obvious reference back to the discussion of the profit motive in the first Essay. Its conclusion, that mutual trading yields profit, is not that at which I expected, far less intended, to arrive in examining the question, and I realize how controversial such a result must be.

D. H. M.

OXFORD, 1934.

## CONTENTS

# I

# MOTIVE AND INTEREST

[What we have been 'forced off' has not therefore 'broken down'. Private enterprise is said to have broken down as regards (*a*) its motive, and (*b*) its sharing of interests.

(*a*) Industry is 'for' a number of things. The nature of its motive cannot be separated from the special conditions of its sphere. Each special sphere has a 'previous question' or condition of discharging its own function. The standards of each such sphere are in some ways higher, in other ways lower, than those of general conduct. Antipathies arise from differences in outlook and experience. The statement of the profit motive has both true and untrue forms.

(*b*) Interest depends on being 'in the enterprise'. This distinguishes 'virtual partnership' from 'industrial relations'. It is an essential aspect of the theory of wages. We may be forced off the former by non-cooperation. It remains valid for a fair comparison between private enterprise and any form of Socialism. A large scale of enterprise is the most promising condition of its practical expression.]

AT the end of the war with Napoleon, the economic position in England was described in the statement that 'peace broke out'. The Great War led to a similar reaction, and our economic life has not yet recovered from the unsettlement. Recovery consists in re-creating the general conditions, political as well as economic, under which industry and trade can reorganize with twentieth-century knowledge, experience, and enterprise. It is not to be assumed that a War by itself changes the nature of the future long-period problem of organization. Industry has nothing to learn from war, as a system of economy has nothing to learn from one in which economy is ruthlessly sacrificed to other purposes. And, on the other hand, the unsettlement of the new outbreak of peace does not show that any of the fundamental factors of pre-war economic life has 'broken down'. It is much more true that economic events are still in the long train of the consequences of our being 'forced off' the 'peace standard'.

A factor of economic life breaks down when its structure proves inadequate to the movement of other social or economic

factors; the open-field system of cultivation, for example, broke down because it was inadequate as a system of food supply to the growth of population. The small business broke down for some kinds of product because it was inadequate to the use of new inventions in productive processes. The gold standard would break down if a fixed price of gold in a free market failed to produce the new supply of gold which would do gold's part in the work of exchange at the prices fixed by the stock of gold. Free trade would break down if an open world market produced uncertainty in trade, through the wide range of possible interferences, out of proportion to the stability which a wide range also produces by the action of compensatory influences. And private enterprise would break down if it produced risk and disorganization out of proportion to cheapness and inventive capacity.

But what cannot stand up to a tornado or an earthquake is not shown to have broken down as a method of normal life. Because the three sheet-anchors of the pre-war economic system have parted their cables in the hurricane, this does not show that they are the wrong stuff to make sheet-anchors of; unless, for the future, the recurrence of war is to be a definite element in the calculation of our economic structure. To take as an example the gold standard. This did not break down; it was set an impossible task by the political aftermath of the War. The Macmillan Committee reported as follows:

'A study of history would confirm the opinion that it is in the changes in the level of price, and in the consequential alteration in the position of debtors and creditors, entrepreneurs and workers, peasants and the tax-gatherer, that the main secret of social trouble is to be found. Looked at from this point of view, the events of the last decade are of the most extraordinary kind. *A very violent depreciation of money was sufficient in the post-war period to destroy, over a large part of the Continent of* Europe, all rational economic calculation, and all orderly social and economic development.' (Para. 204.)

'The financier is not to blame if the politician sets him problems which no financial expedients can solve.' (Para. 16.)

The recent world-wide fall of prices is best described as a monetary phenomenon which has occurred as a result of the monetary system failing to solve successfully a problem of unprecedented difficulty and complexity set it by a conjunction of highly intractable non-monetary phenomena.' (Para. 209.)

The phenomena here referred to are War Debts, the abnormal extension of certain war-time industries, post-war nationalism and tariffs, the paradox of creditors who refuse payment except in gold. Scales and volumes of production which were based on the conditions of world markets before the War do not fit the restricted markets, and the gold scramble has impeded the distribution which is even then left. So capitalism cannot distribute the product of its immense capacity, and by the interactions of the process unemployment further reduces purchasing power. Producers are placed in the cleft stick of restricting their outputs or of forcing, by dumping, markets which will use anti-dumping methods of exclusion. Of what is all this the break-down except of the expectations on which the economic system of the world was established? Even a plan to sell goods is of no avail if some one else is making a plan to keep you from doing so. It was primarily the peace of the world off which we were forced; thereby we have finally been 'forced off' the gold standard, free trade, and a considerable sphere of private enterprise.

So far as the future of any of these factors of our economy were in debate before the War, they should remain in debate now. At that time, in this country, free trade was a plan, not a passive neglect of the question of trade. At several general elections the nation had been asked to decide on projects for tariffs, and had deliberately rejected them after hearing the case on both sides. It is an illusion that there is no plan unless *something is interfered with. There had also been plans to* manage the currency, by bimetallism, or the scheme of Professor Irving Fisher; earlier than that, by the 'tabular standard' of Jevons. The rejection of these made the gold standard a deliberate plan. As regards private enterprise, the theory of

Socialism was as well known then as it is now; so was the proposal for the intermittent use of public enterprise as a makeweight in times of depression; so was rationalization under its earlier names of Trustification, or other kinds of combination. We have to carry on the argument in each case; but the disorganization of the post-war years is hardly an addition to the argument, even though it appears to give opportunity to the advocates of doing in each case that which we were not doing formerly. The rationalization of the industrial system will only be fairly discussed by first rationalizing post-war argument so far as to see that the war hardly affected the *merits*, for the long future of industry, of any of these questions. We have to get rid of the Great Gloat over the present confusion, or its use by various interests to prove the break-down of just those parts of the economic system—free trade, gold, capitalism, nationalism, or internationalism—to which they had *always* objected. Especially those Socialists—and they are the great majority of Socialists—who intend to see that there is no more war should not make war effects so prominent in their case for reorganization. An earthquake does not prove that houses should not be built of bricks. If stone is thought more economic at its price, we can go back to that discussion on its merits. Indeed, the line of argument is not a strong one, in view of what many would regard as the wonderful degree to which what is called capitalism has, in alliance with the social services, resisted an unprecedented catastrophe.

Before the War, the course of events had brought the problem of the rationalization of industry—a phrase which extends to the adoption of Socialism in some or all spheres—to a point which had demoded extreme forms of opinion on both sides. So much so that, even in 1894, Harcourt had stated that 'we are all Socialists now', because of the Estate Duties, a superficial phrase, which has recently been repeated by the leader of the British Conservatives. Much earlier, Gladstone had shown a subconsciousness of the future when

he said, in the Budget debate of 1876, that:

'Of all the taxes on the Statute Book, the Income Tax is the only tax through which it is possible that Socialism or Communism, or anything like them, can in the nature of things find an entrance into our system. It cannot be done by indirect taxation. . . . I do not believe it unjust that the rich man should pay more liberally than the man of lower position; but the unlimited adoption of the doctrine is full of danger to the State, and I ask whether it is wise for us to give the smallest scintilla of countenance to that doctrine, by adopting any proposal such as that now before us. . . .[1] In the Income Tax we have a law admitting of being dealt with in a manner which would have given satisfaction to the Commune of Paris.'

It was just at this time that Adolph Wagner was breaking the new path by his account of the socio-political, as distinct from the purely fiscal, principle of taxation. The Socialism which was adumbrated by both men was that of the public social service expenditures, by which capitalism was to give compensation for its defects. When the War broke out, this kind of Socialism had been established in England and Germany, as a simple evolution of capitalism in a community where social ideas and feelings continued to develop. This middle position had displaced the nationalization of everything on the one hand, and the 'natural' system on the other. The public social services, which were then the compromise of ideas, were simply born of what can only be called the evolution of the fiscal and industrial systems together.

The same was true of more technical forms of rationalization. There was a definite emergence in the nineties of last century of industrial magnates, who made strong claims for large combinations as the proper economic method of carrying on certain industries. Up to the War, they were opposed by legislation, and by the general course of economic opinion. But they had their way; and after the War their list of economies of high combination reappeared as the list of economies of the now popular rationalization movement. Here

[1] To raise the limit of exemption from £100 to £150.

again the mere momentum of economic evolution coerced opinion into understanding and interpreting it.

The flash-points of ideas are reduced to these conformities with the order of continuous experiment, because of the importance of the factor of technique. When this factor is not so important, things can be done more freely out of regard to policy; a policy may be itself the application of large ideas of social philosophy, such as that of combining and unifying as far as possible, with therefore a natural terminus in the control of the State. Economic nationalism or economic Socialism are both policies in this respect. In the economic sphere the importance of technical factors is liable to out-argue idealistic policy, as general public ownership has been out-argued; unless, of course, the policy is explicitly indifferent to any consequences except the victory of an idea, and is willing to pay for that idea. Policy is to some extent also limited by administration, but the limitations here are more elastic than those imposed by technical factors. The technical factors in economic affairs are also the most liable to change, and to put strains on long-reaching policies, in time or place. Economic plans can be far-reaching so far as it is the idea only that matters, as when it is said that national dignity requires us to own our own railways, or that profit should be extirpated as a business motive, or that central banking is too influential to be privately managed. Technique and, to a lesser extent, administration require the compromise of Idea and Service, and it is just in the course of evolution that this compromise is worked out. This 'evolutionism' does not mean merely letting things take their course; things do not take a course; it means that the course of things includes purposes and ideas, in an environment of technical and administrative *conditions*.

There is also prospective argument on this question in the numerous pictures which are often drawn of our supposed economic advance by the end of a future period, such as that of Mr. Wells in *The Shape of Things to Come.* Such pictures are usually derisive of present social and economic arrangements,

but by the time they were realized, the same derision might be applied to themselves. There is not one change to be made, and then we are done. But apart from that, it is not possible to say what processes of invention might reverse present industrial tendencies, or what kind of order is likely to be most workable after a century. We would have been wrong if, in Bentham's time, the then most obvious tendencies of economic life had been raised to a high power and projected a century ahead.

If, therefore, the social thought of the present time can be described as the endeavour to obtain a rationalization of industry, this should not be discussed on the basis of supposing that the exceptional difficulties which we still owe to the War are the 'break-down' of the main factors of the economic order before the War. Second, in continuing the discussion, we have to realize that plans, orders, and systems in economic life are subject to the conditions of that kind of life, especially its technical conditions, between which and idealism there has been and is likely to continue to be compromise which for short times ahead the economist can seek to interpret. The nature of such interpretation is discussed later under 'Sanctions of Rationalization'.

## II

But there is one aspect of the question of what has 'broken down', and of what is rational in future construction, which may be discussed here. This is the relation of enterprise to the motive of profit.[1] Economists have conceded a great deal more than they mean by the frequent 'of course' which they use about this feature of the industrial system. Yet the bad side of the trade cycle, and the duration of such profitless depressions as the present one, show that this 'of course' is not to be taken as an unqualified account of the carrying on

[1] The view that the co-operative dividend is not profit seems to arise largely from a desire to reject the motive of profit. This is discussed in a later Essay.

of enterprise. It is like conceding by laxity of argument to the secularist case that 'of course' we are religious because of the prospect of rewards in a future life. In that case, the secularist bias which is so often ascribed to Communism would be logical, the profit motive being eliminated in both cases. But economists do not really mean all that they are supposed to concede, any more than religious persons would concede that the conduct of life is *for* the gaining of heaven.

The question of 'what industry is for' may be approached by an illustration. At the annual meeting of a large industrial concern the chairman reviews its activity from several points of view. He probably states that the products of the company are in increasing favour with the public, due to the fact that the name and brand are taken as a guarantee of quality; and he refers to any new varieties that are being put on the market. He proceeds to say that the relations between the management and the working staff continue to be satisfactory, or he refers to any questions that have arisen for settlement. In this connexion mention is made of any special provisions, generally called welfare schemes, which the company makes for the health, recreation, insurance, or housing of its employees. Then comes an account of the measures taken to develop the organization, by new issues of capital, acquisitions of interests in other concerns, the purchase of subsidiaries, arrangements for distribution and marketing, agreements with competitors, and similar matters. There is probably some mention of the existence of severe, excessive, cut-throat, chaotic, demoralizing, or simply foreign competition, which may lead into remarks on national industrial policy. The thanks of the meeting are tendered to the higher officials, and to the manager or managing director in particular, for the manner in which the affairs of the company have been administered. The shareholders are then asked to pass certain resolutions necessary to confirm any matters of policy suggested by the directors, including the amount of dividend to be paid and the disposal of any surplus. If things have gone well, the meeting will not be

a long one, and the report will be quickly adopted. If they have not gone so well, there will be questions, and proxies may have to be counted, before the directors have 'got the meeting over', and the shareholders disperse to all parts of the country to attend to 'their own business'.

When it is read closely, this account, which is a composite one derived from a number of such meetings as publicly reported, is a summary of the various aspects of modern industry. The question is frequently repeated, what modern industry is for,—mainly in the more critical discussions of industry. This is a question which admits of no short answer, and it is not really a searching question. The final result of industry is the supply of available goods, and it may be said that all the interesting forms and structures that are devised are like the organization of an army behind the line, but that the acid test is what finally goes over the top in the fighting line of the retail trade. And just as in an army in the field it takes several men behind the line to keep one man in the line, so a very large part of the study of industry is taken up with organizations and structures and roundabout methods which are at several removes from the consumer. But while industry is in one aspect the service of the consumer, it attains that result by taking in its stride other contributions to the national life. It is 'for' occupation, since high forms of civilization regard as desirable the winning of real income through work, and even an uninteresting form of work is preferred to idle consumption; and, in such civilizations, complexity has brought it about that work has become an object of search for the individual. The doing of work has in itself a part to play in the making of personalities and characters, and the loss of unemployment is not only in wages for individuals and products for the nation, but also in personal deterioration. Industry is also 'for' the making of certain relationships between persons —employment, competition, co-operation, association—these relationships being part of the stuff out of which the life of civilized persons is composed. They are essential to the idea

of personal expression and development, and are not merely the strains and stresses imposed by the problem of making a living. Systems of industry are better or worse by this test, and some productivity may be sacrificed for a system that appears better on this ground. Industry is also 'for' forms of life, an aspect which becomes plain when measures are taken or proposed to prevent a type of occupation from losing its place in the industrial system, because of its contribution to the variety, tradition, or prestige of, or ideal reaction upon, the entire national effort. In this country, agriculture is to be specially maintained because it is a form of life more than for any other reason, that form being thought to be not only a desirable part of a nation's life, but to react on the national ideology; some of the great industries are maintained because there is a prestige attaching to their products simply as products of human labour, so that even under the most secure conditions of international trade great nations would rather have a large steel trade than lose it for an even more profitable trade in jam, buttons, or ribbon; the shipping trade makes a contribution to national ideology similar to that of agriculture, since a great ship is perhaps the finest thing that men make, and the sea has always meant the adventure of trade; in many industries there have come to exist local habits of work, speech, and life, and a relation to national tradition and literature such that they are sought to be maintained, to some extent at least, for these reasons. Industry is also 'for' livelihood or income, and this is of course the aspect out of which most controversies arise. The fact that industry must have this aspect has led to the series of criticisms and discontents which arise out of the 'motive of profit'. It has led also to comparisons between the industries of a nation and its professions, to the disadvantage of the former. Some special discussion is needed of this aspect of 'what industry is for'. It is only one of many aspects.

It is necessary to distinguish a matter of procedure from one of principle. If an enterprise were initiated by the group

of artisans engaged in it, they would estimate the rate at which capital could be borrowed and land rented; these would be calculable at market rates. The prospects of the enterprise would then remain to be considered, and it would be worth carrying on if the margin between the expected income and the charges for capital and land were at least equal to the best wages they could obtain in employment. It could then be said that the enterprise was carried on for the motive of wages, because the wages represented the uncertain element in the calculation. Or if a landowner were considering the development of an estate, he would take at market rates the wages and capital he required, and the margin he would expect on the enterprise would have to be at least equal to the best terms he could get for his land if he rented it. The rent would be the uncertain residue, on an estimate of which he would decide whether to carry on or not. It, like the prospect of wages in the other case, would be the factor thrown into relief in his calculation. The usual procedure is that in which wages and land are taken at market rates, and the reward of capital is made the uncertain variable. But these three forms of initiation might all refer to the same enterprise. If in each form it were equally efficient, and the market for its products equally uncertain, what would be the weight of the charge that the risk-bearing party had to make an attempt to estimate whether its remuneration justified the enterprise? The remuneration of the other parties would, in each case, have been taken as given, and the enterprise could be carried on only if it paid both them and the risk-takers. In one sense, the enterprise is 'for' the remuneration of the initiating party, because it is the initiator; but it must first, or in its stride, be for a gross income which includes the remuneration of all the parties, out of which that of the employed parties has priority. The taker of the risk must calculate; 'of course' he must; need we speak as if this was a process in which he was 'detected'?

The method which is implied in such discussions of the ethos of particular fields of human activity may be illustrated by the

case of the Law. In its administration, judges are supposed to have primary, indeed almost exclusive, regard to strict proof by evidence. They may not take into account such humanitarian considerations as whether an accused person was under a strong temptation through some private urgency, or whether his sentence will bring distress on his wife and family, or ruin him professionally, or whether death is a right sentence in a cultured society. But it would be possible to write from the standpoint of an assumed social ethics an eloquent and biting critique of this narrow and soulless mechanism of legal procedure. Lawyers themselves might play into the hands of such criticism if they said that 'of course' the judgement of the law went by proof alone, that the goddess must be 'blind', and have no other weight in her scales. The fallacy of a widely appealing criticism of the field of law on such grounds would be a form of the fallacy of *ignoratio elenchi*. The service of any field of activity has to depend on standards of operation which are within the previous question of its having to be organized for its purpose. In industry, it is a condition of the organization that every necessary resource shall be remunerated, since we otherwise enter on the confusion of subsidy from other resources; just as, in the Law, evidence is confused by an admixture of allowances. The previous question can be raised, whether the organization is the most efficient, in each case, *for its purpose*; but not in the form whether you should take strict evidence or make strict profit. To take another analogy, the elimination of profiteering may be compared with that of red tape; but rule is nevertheless an essential condition of the service of bureaucracy.

It is difficult to separate the threads which are twisted together in the present confused state into which the economic vocabulary has been allowed to degenerate. One feels called on to repeat platitudes through being defied to repeat them. 'Well you know,' said Socrates to Thrasymachus, 'that if you ask a person what numbers make up twelve, taking care to prohibit him from answering twice six, or three times four, or

six times two, "for this sort of nonsense will not do for me"—then obviously if that is your way of putting the question, no one can answer you.'[1] This is really the difficulty. In the course of history, because of the battle of antagonized points of view and interests, a large part of the ordinary terminology in which it is necessary to express the simplest facts has been put under a bar sinister. By encouraging this tendency, economists contribute not to clarity but to confusion and muddle. Mr. Keynes says that 'most religions and most philosophies deprecate a way of life influenced (!) by considerations of personal money profit. On the other hand, most men to-day reject ascetic notions and do not doubt the real advantages of wealth. Moreover, it seems obvious that one cannot do without the money motive, and that, apart from certain admitted abuses, it does its job well. In the result, the average man averts his attention from the problem, and has no clear idea what he really thinks and feels about the whole confounded matter.'[2] The truest word in this statement is the second last. Need he contribute to the confusion by saying that the money motive is a 'somewhat disgusting morbidity'; that 'for at least another hundred years we must pretend to ourselves that fair is foul and foul fair'; that 'avarice and usury and precaution (!) must be our gods for a little longer.'[3] Such phrases are sure to be taken as references to general business standards.

A similar prejudice arises from the ridicule of the 'economic harmonies', because they were framed in religious terms by Adam Smith, who was a Scottish moralist, and by Whately, who was an archbishop, and by the Society for Promoting Christian Knowledge.[4] 'God and Mammon', Mr. Keynes says, 'were reconciled. Peace on earth to men of good means . . . so sang the angels.' And he quotes the Society's observation on how 'through the wise and beneficent

[1] *Republic*, Bk. I. 337. [2] *Essays in Persuasion*, p. 320.
[3] Ibid., pp. 369, 372.
[4] Smith, *Moral Sentiments*, pp. 348-52; Whately, *Lectures on Political Economy*, *passim*; *Conversations on Political Economy*, 1820.

arrangement of Providence, men thus do the greatest service to the public, when they are thinking of nothing but their own gain'.[1] Such arrogations are pious, but from these sources not ridiculous; they continue to be made in political and economic controversy on both sides. One may, with some abandonment of historical sense, criticize such religious arrogation, but it is no *objection* to a system of private enterprise if it is conducive to the public interest. It is no object to Planning either that we might find just the right adjustment between the range suited to conscious purposes and the range suited to the best technical results. If we do, some people will be welcome to call it the divine arrangement. They did not so describe Colbert's plans. The harmony of Planning will indeed seem a less forced one than that likely to be reached by the less explicit co-operation of numerous private enterprises; in the sense that you are more likely to hit a mark at which you are aiming, than one at which nobody is aiming. But the metaphor is not quite correct. On some new scale, each industry will produce some commodity, and its leaders will be engaged in its production and supply on the conditions which seem most efficient, and most conducive to industrial peace and equity in their spheres. But none of the particular groups of leaders will be directly producing welfare; that has still to be the result of the system as a whole. If we do not think about the system at all, in its relation to public welfare, we cannot excuse this real planlessness by a theological reference. If we do consider the conduciveness of one system or another to public welfare, then it is a plan, whichever conclusion on system we accept, just as free trade was certainly for a long time a plan. The argument has to be one of probability and experience, on which harmony and divine purpose are superimposed reflections.[2]

[1] *Essays in Persuasion*, p. 85. But these reflections on divine arrangement are more than twice as frequent in the *Conversations on Philosophy* (i.e. Natural Science) as in the *Conversations on Political Economy*. Theology was then called the 'Queen of the Sciences'.

[2] *v.* Cannan, *Economist's Protest*, p. 430.

To some extent the discussion of enterprise as a question of motive or principle has been influenced by those antipathies which come to exist between classes of different outlook, interest, and experience. Such antipathies are reciprocal, and are to a large extent to be discounted, or treated with indulgence. They are especially the source of the recent claim, put forward by persons in the professions, that the soul of industry is to be saved by 'making business a profession'. It is not clear whether a contrast is intended between industry and all the occupations which are called professions; or between industry and only some of these so-called occupations; or whether what is meant is that there are standards of economic conduct which ought to be observed, and that these are to be defined as professional standards. It is by shifting from one to another of these meanings that the proposition has maintained any plausibility.

I think that there can be few critics of Mr. Tawney's *Acquisitive Society* who would not nevertheless wish to have written it. But I do not think he has tried to enter the universe of discourse of business enterprise without the prejudice of the same antipathy which caused Sir Leicester Dedlock, when he found it necessary to mention a factory, to 'resist a disposition to choke'.[1] He grants that all professions have their blacklegs, and all armies their traitors, but *says* that in industry such things are the rule, while in the professions they are the exception. Acquisitiveness, which is a function of society, is painted in its ideally worst terms, as if the marginally bad profiteer were the representative case of profit. For example: 'It would emphasize that there were certain things—like advertising, or accepting secret commissions, or taking advantage of a client's ignorance, or rigging the market, or other analogous practices of the present commercial world—which "the service can't do". It would . . . make them feel that to snatch special advantages for themselves, like any common business man, is, apart from other considerations, an

[1] *Bleak House*, ch. 28.

odious offence against good manners.' Again: 'the whole apparatus of adulteration, advertisement and quackery which seems inseparable from the pursuit of profit as the main standard of industrial success'.[1] But argument also can be adulterated, and even such a book as the *Acquisitive Society* was not without good advertisement. And the 'common business man', if he had time to resent this contemptuous phrase, and the sweeping accusation of quackery, might wonder what it was to meet the problem of industrial remuneration with the conclusion, which he might think inadequate, that what a man is worth 'is a matter between his own soul and God'.[2] If Mr. Keynes is right in thinking that some system of private enterprise has to continue for another century, in order to solve the purely economic problem, then some proper understanding is required between those who have to work out the problems of organization under these conditions and the professionals who write about them, for there will have to continue to be, as in the last fifty years, a mutual pruning of ideology and technique.

It is difficult to say whether the stage called rationalization which has now been reached is more properly described as an evolution of capitalism or of Socialism, for both these terms have become somewhat vague. In Germany, for example, a National Socialist Government burns the works of Marx. Future steps are likely to continue to be evolutionary, a sort of resultant of the forces of business and of policy. For that reason, the hate-literature is not only bad economic manners but lacks historical sense. It has had an unfortunate effect on the relations between that intermediate system, the co-operative movement, and the private retailers, by the suggestion that the former has a morally superior position in that it does not make any profit.[3]

It is capitalism that has suffered most in respect of the

[1] *Acquisitive Society*, pp. 196, 179.
[2] Ibid., p. 221.
[3] Except on non-member trade. But see Essay VII.

amount of the logomachy, because those who can speak with most direct knowledge of the motives of representative enterprise are busily engaged in industry, while literature enjoys the greater freedom of a profession. The most recent literary phase of the capitalist is related to two facts which have caused some annoyance. A fact of the present, that the defenders of private enterprise meet the arguments of its opponents; and a fact of the past, that the end of capitalism has continued for so many decades to be prophesied as imminent. Either of these facts is in mind when capitalism is described as diehard. Capitalism has also had the worse of the mere give and take of words, because of the suggestion of bite and spit which its pronunciation can be made to carry, while little real hate can be got into that of Socialism.

There is no limit that we can see to the transformation of the industrial system, though there is at any time a large margin for error in projecting ideals far ahead and calling that the future. In the interpretation of the past we ought not to debit both the evils that have had to be overcome and the means taken to overcome them. I think that Mr. Tawney tends to do both in what he says of the Factory Acts, the associative movements in private enterprise, and the contribution of the capitalist system to the social services, which he calls a 'mere matter of machinery'. We cannot, in an examination of purposes, debit all this because it had to be done, and credit the professions with the rules they have had to impose on their members. There is no special purity of motive in obeying rules, if the penalty of disobeying these rules is to be professional disqualification. Of the standards of the Law in his time, Dickens wrote that 'the one great principle of the English law is to make business for itself. There is no other principle distinctly, certainly, and consistently maintained throughout its narrow turnings. Viewed by this light, it becomes a coherent scheme and not the monstrous maze the laity are apt to think it.' It may be a matter of opinion how far this has been changed, and how far it is the most easily

available justice for all classes that is worked by professional rules. On the other hand, the standards of industrial competition have created less considerate relations between competitors largely because of the intensity of the purpose of making goods available. This intensity is connected with a fact that is special to industry, the indefinite range and variety of what is to be made available, while it is not the proper purpose of law or medicine to make more people litigious or sick. But if these professions have in time applied regulation to their relatively 'close' markets, regard for difference of spheres and conditions should allow the regulative movement in industry as a credit, even if it has passed through Trustification on its way to what is now called Rationalization. The difference is not in the motive of personal gain. There is more than one kind of such gain; the common business man now works largely for anonymous companies, so that his contribution to economy and availability of goods brings no direct credit to himself. But it may be doubted whether lawyers or authors would willingly have their services so rationalized as to supply them in the same way through anonymous channels. There is no doubt that practice has to be regulated in industry, as it has been in a limited number of so-called professions; but a representative professional person, who considers the differences of conditions, can only be uncomfortably pleased to find himself written up as a model for the representative business enterpriser.

The meaning of entering into a special sphere of discussion in a complex society has been stated by one writer, who points out that

'in joining to create a social mechanism for the achievement of some social aim, such as exploiting a mine or electing a candidate to a public office, a man isolates a certain part of himself, and sends it off by itself to work independently of the rest of his aims and impulses. Other men do the same, and the result is essentially mechanical and not human. . . . Every social group recognises and enforces such rules of morality as conduce to the attainment of the end which, as a group, it seeks. . . . As regards the virtues particu-

larly important to the prosperity of the social group, its standard will be higher than that of the people in general, while other sorts of morality will be correspondingly neglected.'[1]

This statement is partly true, but still leaves the question 'confounded' for the ordinary man. The truth of special standards is seen in such reactions of criticism as are expressed by red tape, academic argument, pettifogging, business practice, or hard-and-fast professional rules. But there is only one word, conduct, to express two aspects of specialist activities. The first is what may be called the previous question of how a specialist activity, like business or law, can perform its function; once we are in the sphere of that activity, the previous question is taken as settled, and on grounds of general social purpose or morality. A lawyer, or even a Socialist writer, will 'snatch the advantage' of a mistake by the other side, just as a boat-race crew will snatch the advantage, and not wait for an opponent that has caught a crab; and this would be ungenerous, if the previous question had not settled that generosity would not be the whole truth about the opposite conduct. In the second sense, conduct is practice according to specialist, and not general, standards; in this sense, usury and monopoly are opposed to profit, as misrepresentation of an argument is opposed to taking advantage of a mistake. The difficulty of deciding what practices of special spheres are in accordance with its conduct is very great; for example, free trade has been opposed by fair trade, the border of expediency between secrecy and publicity is not easily to be decided, there are 'white lies', dumping has been held both to be wrong and to be normal, and the most serious present problem is the justifiable use of restrictions on output. These are all 'within the previous question'. Even the right kind of Rationalization is within it. We do not get into the 'universe of discourse' of specialist activities if, for example, we call profit avarice and cupidity, or call advertisement self-glorification, or compare

[1] Cooley, *Personal Competition*, ch. v. Cf. Taussig, *Inventors and Money-makers*, ch. iii.

business competition with missionary work, or in other ways discount the previous question of specialist function. It will be remembered that even charity, the 'greatest of these', has been organized.

Though it only comes to saying ordinary things, it may be worth while to state five ways in which the proposition of profit may be taken. First, that an enterprise will not be entered on unless it offers the prospect of a profit. Second, that enterprise will generally expand on the prospect of a greater profit. Third, that enterprise will not continue unless profit continues. Fourth, that modern private industry is favourable to the making of excessive profit. Fifth, that enterprisers subordinate the making of profit to every other consideration.

Of these, the first two are true, the third and fourth not true, while the last admits of no answer except by a census of the motives and characters of persons. The fourth statement is the subject of later discussion in these Essays; it will be seen that the rate of economic profit taken by the E.P.D. Act conforms closely to the rate which represented the pre-war risks of loss in company enterprise. It is still possible to hold, as rationalizers do, that the risks of private enterprise are excessive; and this is an important question, but a different one from the proposition of profit. We ought not to debit private enterprise both with the suggestion of a profit condition of continuance, and with both sides of the trade cycle. Next to capitalism, profit is the economic term which has been allowed to carry most undue suggestion of evil.

The painful discussion of this question is relevant to three conditions. First, to the condition of economic research. That is carried to fine issues of high analysis, in relation to and on the assumption of the initiatory function of capital in enterprise. Along with this go two things. There is a great increase of social literature which regards the assumptions as intolerable, so much so as to render close research on that basis an uninteresting occupation. It is impossible not to attend to this

breach of interest. On the other hand, economists so express themselves on the subject as to commit the fallacy of supposing that, by seeming to admit something, you have replied to that thing. We ought not in this way to run with the hare and hunt with the hounds.

Second, there is the obvious condition of the amount of sympathy which will exist between business men and the study of economics. A reasonable understanding is not made easier by letting it pass that the difficult constructive work of business about which they know most is a sort of function of avarice and cupidity.

Thirdly, a question of evolution. We do not know that we shall not have to continue to make the best of free enterprise, so that we should not, for the sake of a hedge against its possible transformation, make any pose of saying the worst of it. In the last fifty years the former ideas of both capitalism and Socialism have equally been conquered by the simple evolution of industrial possibilities and social conscience; the present result can be equally well stated as the triumph of either set of influences. It is said that 'we are all Socialists now', but if the Socialism of the 'eighties had been in force some one could have said that 'we are all free enterprisers now'. We may leave it to the contest of ideas and industrial conduct without savaging either of them.

## III

The question of motive has another aspect, in its relation to the control of industry. This question has periods of revival, and then it retires by neglect or exhaustion from the field of discussion. That there persists some recognition of an unsettled question is shown by the existence of schemes in many businesses for creating relations of consultation, if not of sharing in direction, between labour and the representatives of capital. But there are few, if there are any, enterprises in England in which labour shares, through representatives, in the full control. This is mainly because it does not want to,

the aspiration for sharing in control having been swamped out by the larger issues of the transformation of private enterprise into some other system. While the present position remains, the motive of enterprise is not shared by labour. But the question is still one which ought to be argued, especially if a matter of equity is involved in it, and if it is thought that something like private enterprise will endure for a considerable time yet. It is also possible that the issue between private enterprise and any type of Socialism will be a fluctuating argument, and that modifications of private enterprise may be again the centre of the case for 'industrial democracy'. Whether it goes to show the impossibility of a share in full control under private enterprises, or the opposite, it is necessary to confirm the nature of the actual economic position, for a large phraseology of somewhat arbitrary use is always hanging round the question of rights and claims in industry. A few years ago the Guild proposal gave the subject a fresh prominence, since when it had for a time less attention, but has now been revived as a feature of Socialist plans. Is the issue such that, while there are possibilities under socialized industry for giving scope to the employees' aspirations for a share in control, and therefore for the motives of interest and efficiency which depend on it, there are no such possibilities in private enterprise? For this is an element in the comparison of the systems.

A distinguished cleric recently described a system of pure contractual employment of labour, with exclusion from any share in control, as 'an insult to personality'. Mr. Tawney makes it a fundamental principle of industry that 'its direction and government should be in the hands of persons who are responsible to those who are directed and governed, because it is the condition of economic freedom that men should not be ruled by an authority which they cannot control'. But, in the first clause of the Engineers' Agreement of a few years ago, it was stated that 'the employers shall not interfere with the proper functions of the Trade Unions, and the Trade

Unions shall not interfere with the employers in the management of their business'. This was called the 'General Principles of Employment'. On the other hand, the Royal Commission on Labour (1894) described the relations of capital and labour as a 'virtual partnership' the terms of which, they hoped, 'would come to be more clearly understood'. In the Works Councils legislation of Germany and Austria an attempt was made to express this virtual relation in the explicit terms of a representative share in control. A share in control is entirely different from the facilities for consultation which belong to the subject called 'Industrial Relations'.

The problem is sometimes expressed as that of a 'franchise in industry'. The modern idea of freedom is based on the model of the political franchise, whereby control is exercised through elected representatives. It becomes natural to extend this to every sphere of activity, and to judge the conditions of that sphere by the scope it gives to personal freedom of this type. It is, however, doubtful if we can transfer the idea from the State in general to particular spheres of activity. The constitution of each sphere must be related to the special function it has to perform, or service it has to render. This is seen, for example, in the constitution of the Army and Navy, which are described as pre-eminently 'the services'; and also in that of the historical churches. The King's Regulations, in their rules of discipline, most narrowly limit the rights of a soldier in both act and speech, and do not give him any real share in the control of his battalion or regiment. Industry has not been the sphere of the greatest exercise of authority, and a trade unionist has had more influence on the conditions of his work than a soldier or an ordinary parishioner has had over the direction of these spheres of activity. Clerics have been apt to overlook this in their critiques of modern industry. At the present time, also, the political model of freedom, which has been popular so long, is being challenged in some countries.

The problem of control is, however, a part of the theory of

wages. It is not the only duty of that theory to decide the equitable terms of remuneration. It is possible for contractual conditions for the division of a net surplus to exist even between partners, as is shown by partnerships *en commandite*, or by the different terms on which shares are issued, or by the manner of sharing the dividend of a co-operative society. The theory of wages includes the questions of the employee's interest, enterprise, and motive in the concern, and in fact defines what they are paid for. Any mere contract for the supply of anything, to an enterprise or other purchaser, from outside the enterprise, comes under Gresham's Law, the generalized form of which is that a bare contract will be fulfilled on the minimum conditions that satisfy the contract. If you do not contract for fresh eggs, you will only get 'eggs'. The marginal value of labour may not be the same, if it is the value of labour having status in relation to industrial control, as it would be without that status. Therefore, this question is part of the theory of wages, viewed more broadly than when we merely put a microscope on the margin of productivity.

A theory of wages fails if it pretends to a view of labour on which an industry *could* not work. But just as there is a distinction between a failure of the gold standard and being forced off it, there is a distinction between a wrong theory of wages and a right theory which we are forced off because it is not given the conditions of working. A pure non-cooperation between labour and capital, or both of them, in the endeavour to express in practice the 'virtual partnership' referred to above, would force us off that practice, however fairly it might be argued. But as we might be forced off other constructions for other reasons which arose in their application, or they might break down, a simple non-cooperation does not liquidate the economic question. For example, when the railways of this country were reorganized, the Ministry of Transport said: 'Each of the grouped railways will require a Board of Management. . . . The composition of the Board is considered to be of the greatest importance and, whilst in the past the

Directors of railway companies have all been appointed by the shareholders, the Government are of opinion that the time has arrived when the workers, both officials and manual workers, should have some voice in management.' Proposals were made to that effect, but it was reported next year that 'the proposal for the inclusion on boards of management of representatives of the workers and officials has been abandoned, as such representation is no longer desired by the men. The Government, while regretting this decision on the part of the men, does not propose to ask Parliament to make a provision which neither the companies nor the employees desire.'[1] Now it will be argued in the next Essay that one of the tests by which public policy may decide on a proposal for rationalization is the test of the consent of *leaders* in the industry. In this case, the leaders on both sides said 'No'. But the consent of leaders (as distinct from majorities) is a sanction of a rationalization plan, mainly because of the factor of technique. But the non-cooperation shown in such cases as the above is much more a matter of policy than of technique. It depends to no small extent on class antagonisms which have been historically created, and are not based only on economic grounds. For the railway industry, it 'forces us off' the use of what may still be arguable on its merits, especially as there is no alternative on which both sides are agreed.

There has in fact been a considerable crossing of two points of view, which are not the same, but are mistaken for each other. There is economic Socialism, and what may be called social Socialism. The latter depends very largely on objections to parts of the social order which have effects on the economic order, but are not themselves economic. Such are landlordism, hereditary wealth and influence, the absurd costs of legal procedure, Stock Exchange operations, or the ostentation of wealth. These, by a shift in the sense of the term 'rights', have caused to a large extent economic non-cooperation. Thus Mr. Tawney, in arguing that industry is 'organized

[1] Cmd. 787 of 1920, and Cmd. 1292 of 1921.

for the defence of rights', refers frequently to the rights of property, and is arguing on social Socialism; the profession of the law, which defends these rights, is in many restrictive ways on the back of industry. But it is not industry which defends 'rights to pecuniary gain'; it is somewhat ruthless in its disregard for the rights of investment either to profit or to the integrity of capital. But the antagonisms of social Socialism, based largely on class origins and privileges, have been carried over into economic relations, and to this is due in large measure the failures of economic co-operation.

Is the idea of 'virtual partnership' correct, but blocked by social antagonism, or is it only a loose way of speaking? If it is correct, it is proper to consider under what conditions it may be expressed, and this strictly belongs to the theory of wages.

Investment is itself a function. There may be behind investment the question how the invested resources were obtained, whether by work or without work. But investment is by itself a function, and a continuous one in any enterprise. The investor is personally an absentee; but there is very little in that, though much play may be made with the word. The function of the personal absentee is only another way of stating the fact of investment as a necessary element in modern organization. Labour is also a function, and the question is whether as such it is 'within the enterprise'. The pure bargaining theory of wages says it is not. The control argument says it is. The seller to an enterprise of raw materials is not in the enterprise; neither is the lender of loan capital. What is the ground of distinction?

It is not solely function, because the lender of secured capital performs a continuous function. Nor is it solely the risk of enterprise, because a safe concern would not, for that reason, have a different control from an unsafe one; and risk would not differentiate between labour and capital in any case. It does not decide anything regarding control that capital takes the risk of capital, in loss and depreciation, and labour the risk of

labour in unemployment. These are co-ordinate, because while the loss to which capital is liable is both an income and a value of investment, the wage of labour is to be compared with both of these together, since wages include the replacement fund of labour. It is not the question of a contractual relation, since partners may make such contracts between themselves. The wage contract represents what should be called the concession to primary income. Income from investment is secondary, in the sense that an investor has, behind that income, the power of earning income by work; for that reason, he can wait for a dividend. Primary income has not the same power to wait, so that even between partners of these different kinds there would be a contract for advance payment which, if entirely fair, would come over a period of time to the same thing as if both parties had waited for the dividend, ordinary interest being allowed for. (There is a second concession to primary income in profit-sharing schemes, since wage-earners do not share losses.)

Who are in the enterprise depends, as it seems to me, on matters of interest and motive. Together with continuous function and risk, there has to be the power, on the grounds of interest and motive, to vary the efficiency of the function or service of the parties, and therefore of the enterprise. The lender of loan capital and the seller of raw and auxiliary materials are out of the enterprise, though they are represented by fixed or circulating capital which performs continuous functions in it. There may also be labour which cannot, by any motive or interest, influence the efficiency of the enterprise; such as a barrister's clerk. If the terms of 'virtual partnership' are, as the Royal Commission said, 'to be better understood', then the question of procedure is one of scope for interest and motive. How far does private enterprise allow of a fair procedure of this kind, whether or not we are forced off it by non-cooperation?

It will be agreed that the lines of procedure must be those of arrangements which make a claim on the motive and

interest of the parties in the enterprise; and also that, in a modern democratic State, this must be by some kind of representation in the *management* of the enterprise. The enterprise consists in making and selling goods or services. Consultative arrangements regarding the conditions of employment are not in place here, for they do not relate to the enterprise. They belong to the study of 'industrial relations'. There are, indeed, two different ideas of the scope of employees' 'control', and they relate to different aspects of work. People wish to have something to say, directly or by representatives, as regards the conditions under which they work; this kind of aspiration is quite distinct from the desire to have status in the enterprise.[1] In respect of the former, there is no class of labour which could be excluded; in respect of the latter, there may be classes which could not claim to be in the enterprise. For example, the clerks of banks would not be regarded as in the enterprise of banking; but shop assistants are in the enterprise of retailing. This represents the difference between Works Councils, or other arrangements for consultation on 'industrial relations', which are a matter of organization, and the representation of labour interests in the enterprise, which is a new question of principle.

The problem of equitable arrangement in the latter case is a difficult one. There is no equation between units of labour and of capital, by which they can be so assimilated as to enable us to say what 'labour shares' in an enterprise would equitably correspond to a number of capital shares. Let an enterprise have a capital of £100,000, and a wage bill of £30,000. The share of labour in a partnership could not be decided by capitalising the wage bill and comparing the result with the other capital. It might be theoretically possible to contract for the labour supply for a sum of £500,000 down. But the enterprise could not then be represented as having an automatic capital of £600,000. The cost of the labour

[1] *v.* Goodrich, *The Frontier of Control,* which delimits the former in its chief aspects.

contract would mean that the whole wage was being capitalised; but that wage includes the replacement fund of labour. In the case of the ordinary capital, dividend would have to be a different thing if reserve and depreciation funds were not provided by the finance of the enterprise, and therefore withheld from distribution. We cannot therefore get a figure for labour shares, of a comparable kind, by capitalising wage income on the same basis as dividend.

But the solution of the question of shares in government is always a practical rather than a theoretical one; even the principle of 'one man one vote' is this in the political sphere. Even among shareholders in enterprises different rules are followed; most go by shares, but some, like the co-operative societies and the Bank of England, by heads.

The most straight proposal to create labour shares in enterprises is that made in the Companies Empowering Act, passed in New Zealand in 1924. It gave companies power to create labour shares of no nominal value, and not forming part of the ordinary capital, issued to persons employed in the company. They entitled the holders to vote at shareholders' meetings, to share in profits, or in the assets if the company were wound up. Except as otherwise provided, the holders were to have all the rights of other shareholders. The shares had a surrender value on cessation of employment, either in cash or in ordinary shares; and any share in profits could also be paid in ordinary capital shares. It rested with the company, and therefore with the original ordinary shareholders, to make the regulations beyond the minimum conditions. Only two companies have as yet adopted it.

The problem of equitable arrangement would arise, in the same way as it does now, if there were any scope for the suggestion that investors should be paid off for the wage of capital, and the conduct of the business placed in the hands of those personally engaged in it. For, on the assumption that investment is a function, a new kind of wage-earner, the investor, would then be excluded from control, and this would

just turn the question round to where it was. But the proposal to pay off capital at its wage, which was popular at the time of the Guild movement, seems now to have been abandoned in the sphere of private enterprise.

The consideration of schemes for the expression of 'virtual partnership' has in modern enterprise the following aspects of concession. First, the concession to *initiative*; this is not quite the same thing as the proposition that control goes with risk, but is perhaps what the risk theory really has in mind. The initiators, just as such, will want to secure their own predominance in control; the risk of enterprise, as will be shown later, has been declining, but, especially in large-scale enterprise, initial planning is an increasing function. Second, the concession to *skill*; this at present further weights the advantage in favour of capital, because its governing representatives can be drawn from a wide field, through the fact of absenteeism, while employees' representatives have to be chosen from persons who can work only for one business, and this lessens the chances of obtaining representatives who have the same qualification of skill. It may, however, be possible to give an 'employees qualification' to a person who would be a desirable representative of labour in an enterprise, but was not yet employed in it; just as a director's qualification is arranged. Third, the concession to *motive and interest*, which largely counteracts the question of skill.

Therefore, while private enterprise continues, any representation in control of the employees who are in the enterprise would be a minority representation. But under these conditions this is desirable. Because what is aimed at is to recognize a status and to give room for an interest while business is being harmoniously carried on, while, at times of disputes, representatives of labour are better placed if they are in a minority on boards of control, and cannot therefore be held responsible for decisions. Such a conclusion may appear strange or biassed, but it is much better to have an arrangement which frankly recognizes the existing differences

of industrial loyalties than to make one which would certainly lead to confusion and probably to break-down. Schemes of reconstruction which would place a majority of labour representatives on boards of control may, as long as the right to strike is maintained, do worse for the labour movement than a share of control which could not be charged with responsibility in case of disputes. Thus the Works Councils Act in Germany requires only that 'one or two' members of the Works Council shall be appointed to the Board of Control.

But how must this idea be related to the actual forms of enterprises—according as these are large or small, or as they are individual businesses, partnerships, private or public companies? I suggest that any action in the direction of industrial democracy, in this sense, is most reasonable when enterprise is on such a scale that there is similarity in the range of interests of capital and labour. It appears to be most possible of all in the type of enterprise which is reached by plans of rationalization; that is, when all, or a large part, of an industry is worked under one control. Labour is not organized for its interests, as capital is, by individual enterprises, but by crafts or industries; and the objections to participation of labour in profits or control seem to lead back to an objection to having the groups of wage-earners, who are employed in separate enterprises, thrown into explicit competitive relations with each other. The larger the scale of enterprise, the more are such considerations cut out. Further, it is perhaps more practicable that representatives of labour on controlling bodies should be removed from too close a relation to the employees they represent; since their position may thus be more tolerable, and they may be able to act with independence and responsibility. It might even be held that no schemes of labour participation in control are worth considering except in relation to enterprise of a very comprehensive scale; such, for example, as came into existence when the coal industry of Germany was publicly reorganized after the War in regional Cartels, with a central Cartel over them. It would then follow that,

if a share in control is a right aspect of employment, for those in the enterprise, it is to the credit of the schemes known as rationalization schemes that they make it easier to carry this out. It is indeed difficult to imagine that large plans of that kind can be acceptably presented without allowance for this feature of control and of employment. An economist cannot do more than suggest the possibilities; the sanctions of rationalization, that is, the grounds on which changes may be urged or imposed upon industry, are argued later. The limitation on outside dictation to the organization of industry is in technique, which is presumably best known by those actually engaged in enterprise; but the control argument has much to do with the other aspects of outside interest, namely policy and administration. Even if small enterprises had to be left out, the large ones would still include the great majority of wage-earners; in America, in 1919, establishments having more than 500 wage-earners employed 40 per cent. of the wage-earners in manufacturing industries.

While in respect of methods of application an economist has to realize the limits of suggestion, I would insist all the same that this question is part of a right theory of wages. The determination of the economic rates of wage-payment does not complete that theory. There is still involved a view of what wage-earning is in relation to enterprise. For that reason, it is properly discussed as an aspect of interest and motive. Non-cooperation in carrying it out does not bar such discussion. Neither do statements *in terrorem* about tinkering with the capitalist system. The best judgement between private enterprise as a system and any alternative cannot be made between a limping standard of the one and a flying standard of the other. Political interest is maintained by the fact of enfranchisement, even though a voter exercises his right only once every few years. Therefore, though the Works Councils in Germany have not been so successful as was hoped, the law on which they depend is of great significance.[1]

[1] *v.* Guillebaud, *The Works Council.*

## II

# SANCTIONS OF RATIONALIZATION

[Sanctions are the grounds on which public opinion, though not technically expert, may consider critically the organization of particular industries. Rationalization is a question of future economy rather than of past causes. The analogy of biological organisms is of limited use. The authority of public opinion has different degrees, according as it is policy, administration, or technique that is in question. The chief sanctions are general industrial tendency, foreign example, and the support of leaders of industry. Public utility industries are not a good precedent from which to argue general tendency. There can be no adequate policy of rationalization which does not include provision for the regulation of trade practices.]

THE argument of this Essay is concerned with a phrase recently become current, the rationalization of industry. In a broad sense, the previous Essay might be said also to deal with some aspects of rationalization. But it is more usually understood to refer to the construction of industry, whatever its motives or the interests represented on its government. A point of departure may be found in the phrase *laissez-faire*. The affectation of this phrase, like saying *terra firma* for firm earth, is not the worst of it; the knowledge of a foreign language thereby displayed is not worth while. It is an ambiguity, because it is used for *either* an attitude of distrust towards much legal interference with the organization of industry, *or* one that favours the continuance among enterprisers of a large amount of independence and competition. Of course these attitudes are acquired, and based on argument; they are not mere prejudices. They are properly expressed as privacy of enterprise and independent enterprise. In its origin, rationalization was not related to either of them; it had an accidental and temporary meaning in Germany. But it has come to mean the opposite of both the meanings of *laissez-faire*; that a public policy about the organization of industry is required, and that that policy should be one which either encourages or compels association or amalgamation, at

any rate or at first in industries of the most fundamental importance. This twofold idea is arguable in both aspects, and the word which expresses it should not simply beg the question covered. This Essay is an attempt to express what the policy of rationalization ought to mean, in a nation which has specialized industries, and has reached the stage of economic politics.

At the time of writing, changes in the structure and conduct of industry are being either urged or imposed or threatened by the governments of various countries, notably the United States. These changes have not always been acceptable to industrial leaders, many of whom have resisted the policies. This situation raises an important issue, since the conduct of an industry cannot be regarded as a matter obviously suited for political decision. It is this issue which I propose to discuss, a 'sanction' for such public rationalization being defined as the measure of justification for public decision on how affairs involving various kinds of special technique should be carried on. There are also involved competitive influences from sources outside the control of a particular government, when the industry in question is not of the nature of a local service.

It is possible to do things in the name of a general policy, things which, when done, conceal diseconomies; or to do things which set up a strain between a policy which, when once adopted, is difficult to reverse, and changes in industrial technique; just as it is possible for a public policy to do soon what a group of industrialists would do only after much delay, or to introduce desirable uniformity in business tendency. My purpose is merely to define an issue the right settlement of which is not easy to decide, and to set that issue in an order of ideas.

The question is of *right knowledge* in relation to an *intense interest* in industrial order, or plans. Whose authority ought to be accepted in the formation of such plans? Industry is very largely a technical question. It has trained its own leaders

and has become specialized in the course of its own history, by the method of practice. In deciding what is a right or workable plan for an industry, can any judgement be superior to that of the business leaders who are engaged in performing the special function of management? Or, are there aspects of industry in respect of which their judgement has to be accepted with more or less authority than in respect of others? Can a new plan for the cotton industry be authoritatively propounded from outside that industry; can it be authoritatively accepted or rejected except by the consent of those who know most of the working of that industry? Perhaps the answer to this question has to be a divided one, for there are three aspects in which an industry may be considered; the aspects of policy, administration, and technique. Inside and outside judgements on organization may be differently valid or justifiable according as it is by one or other of these standards that plans are proposed.

We have come to an economic era of political discussion, and this yields the anomaly of an intense public interest in matters on which the public is not so obviously competent to give a decision, as in respect of reforms of political rights and constitutions. The intensity of the interest does not by itself guarantee the value of the schemes which may on that ground be constructed. An economic plan is workable or unworkable for economic reasons, just as a military one is for military reasons. The proper constitution of an army is, however, left to the military experts much more readily than that of industry is left to industrial leaders. The whole question of special knowledge and function is raised when Parliament adopts or enforces a scheme to reorganize an industry. It is one thing if such a scheme is made in response to an application from an industry for powers to do something which the leaders of the industry wish to do, but are obstructed in seeking to do; quite another thing if the scheme arises out of the ideas of publicists who want Parliament to do something which the industry does not want done. Before the War, the

publicists were alarmed about the Trusts and Cartels which industrialists wished to carry through, but now a Cartel has been imposed on the coal industry against the judgement of many of its leaders. This question of sanctions is therefore a new feature of the era of economic politics which has arrived. It may be further illustrated from the post-War history of the coal industry. For the Sankey Commission concluded that 'either nationalization or a method of unification by national purchase' should be the form of reorganization, while the Samuel Commission, only seven years later, called this a 'vast and hazardous experiment' and was 'clearly of opinion that the variety and freedom of private enterprise are more likely to conduce to the progressive development of this particular industry than control by the State'. If, therefore, the former proposals had been carried out, under the influence of public agitation at the time, something would have been done to a fundamental industry which, according to a later investigation, would have been disastrous. Where, then, are we, in respect of the right sources of opinion? Is there any appeal from the actual evolution of industry, in the hands of those who presumably know most about it? There has been a reversal of thought and policy about Trusts, Cartels, and other combines, and shall we, ten years hence, be speaking of the 'planning fallacy'?

It is said that the economists of the nineteenth century made a mistake because they ran after an idea that was a mixture of economics, politics, and philosophy, and set themselves to justify the harmonies of the competitive method. The new idea also comes with a tendentious name, and economists of to-day would do the very thing which earlier economists are accused of, if they rode the horse of rationalization harder than the pace of industry could keep up with. We ought to smooth the fluctuation of thought. Especially, it is not to be supposed that there is one great change to be made in the constitution of industry, and then we are done. The course of industry will be largely guided by technique,

the future of which is not calculable, and in an efficient economy organization will have to fit technique at least as much as technique will have to fit organization. At any stage, we have to know what are the right sanctions of plans, in both their intensity and their time range, before we are reasonably allowing for both technique and ideology.

Though the freedom of enterprise may, in both its senses, be a plan, for the purpose of this discussion, I take Rationalization and Amalgamation as convertible terms, the fundamental idea of both being that the enterprise of an industry should be co-ordinated or combined to such an extent that the industry may be said to have one conscious policy, whether publicly or privately worked. The terms do not carry any odour of approval in themselves, because the amount of planning possible in industrial technique is uncertain, especially as regards range of time.

When a public opinion is referred to, I take this as corresponding to what is meant when it is said that such an opinion in favour of free enterprise, in both senses, was once predominant. It is made by publicists, political and economic, and it draws on the credit of such words as freedom on the one hand and order on the other. It causes inquiries to be set up, and influences their attitude to evidence. Official or semi-official bodies may be established in connexion with industry with a presupposition upon their work, drawn from the prevailing sentiment; such are many of the recent reconstruction corporations. This prevalent opinion has to be allowed for; it has arisen from observation. It may be partly of the nature of concession to advanced views of change. The question is how we are to satisfy ourselves that the specialists who control so important a field as industry have properly attended to its claims, or in other words, how we are to test the authority of the specialists in industry who oppose these claims. This is how in recent years an issue has been set, by inquiries and movements and legislation, between some of our largest industries and an attitude of public opinion.

## II

Now the first approach is historical. And this is either a general one, because of the actual course of private enterprise, or special, because of the reactions on industry of the war.

In a later Essay an attempt will be made to show the costs of the competitive system, in what may be called the trade-cycle era. So far as capital is concerned, the risk factor appears to have been declining, both in England and in America. The risk of labour, as measured by unemployment in England, fluctuated about the same average since 1860, at a figure which would now be regarded as insurable. The decline of capital risk may have been, and probably was, due in part to the grafting on to pure competition of various forms of association and combination, generally in the face of public suspicion or legal opposition. But still, the risk factor was expressed in a figure which required the economic rate of interest on investment to be 6 per cent., a large addition to pure interest. This was the figure taken for the reckoning of Excess Profits Duty. Now the first sanction of rationalization has been expressed as an enterprisers' reaction to 'the divergence between profit and risk'. It is retrospective. The return on successful investment had to average 6 per cent. to make good the losses of insolvency. This may have been a motive for arrangements between producers, designed to eliminate competitive risks, or for large combinations. It was a reason commonly given by Trust leaders in evidence. But this is not in itself an argument for *any* range of such schemes. Nothing in economics succeeds for reasons of the past. The economy of an organization depends on how it can face present and future market changes. Organization of a certain size, made because of past risks, is not for that reason economical organization. It seems to be well agreed among business leaders that limits on the economic scale of enterprise are actual, and not matter of theory. It may seem strange that, when one man can be Prime

Minister of England, a single business organization, with all the assistance of administrative devolution, can be too large for single management. This is due to technique, which changes the nature of the problem in the two fields. Older accounts speak of an economic limit on the size of the *establishment* or *unit of process*; later accounts extend the limit to the unit of *enterprise*, which may combine many units of process. With this extension, managerial questions became, relatively to mechanical ones, more important, but the problem of the most suitable size remains. If this is so, any further combination which implies common management is not economic, though it may be undertaken in defence against competitive risks. If the defence against risk results in the Cartel type of association, the common supervision may only extend to marketing, or it may, as in the English schemes, use this as a temporary cover within which amalgamation is to be fostered. In either case, the economy of the system is a question of the future, not of the pressure of past risks. How far the past risks were chargeable as costs is not easy to say. The economic rate of 6 per cent. was necessary to replace the losses of insolvency; but was this an operative fact, or an outside point of view? If the fact was only that those who succeeded, succeeded, and those who failed, failed, on this statistical basis, the amount of cost reduction available for rationalized industry in comparison with independent enterprise would not count for full face value, and rationalization would all the more have to be a question of futurity, just as if the industry were being planned from the outset, without a history of risk. In other words, the amount of association, or understanding, or combination between producers which meets the problem of competitive risk may be far different from that which leads to the most rational organization of production; and that degree of organization is entirely a question of its own, whatever the motives that led to it. If there is a most suitable size of enterprise, based on productive or managerial technique, then some degree of competitive risk remains, to be dealt

with otherwise than by the consolidation method; for example, by the right use of trade practices.

The more particular case of the historical approach is related to the war. As a matter of opinion, the War caused rationalization to be popular, while the Trust and Cartel movement had been critically treated. In part, this is ascribed to the 'break-down of capitalism' in the last few years. I do not regard 'capitalism' as a word from the vocabulary of quite accurate thinking. But what happened was the creation of maladjustments of investment and direction of labour, followed by a number of arbitrary conditions created in the peace, by new frontiers and tariffs, national rearrangements of sources of supply, imposition of some debts and repudiation of others, and the tribute system of reparations. All this culminated in the run on the international gold supply of recent years. To call this series of political accidents the 'break-down' of the industrial system is absurd. It is much more the break-down of interference with that system. The more the post-War crisis has to do with policy, the less it has to do with system; and the amount of it due to policy is certainly very great. How far whole industries can be planned as units is not a post-War question, but just an economic one, as it was before. The same is true of tariffs, or international producers' agreements. They will work, or not work, without reference to their having been stimulated by the war. The same is true of Plans. They depend for their range on policy, administration, and technique, as they always have to. The War has been a stimulus to thought, because recovery from its effects has emphasized some aspects of organization which were less popular before it. The passage of an earthquake does not show that houses were badly built, and the form of rebuilding remains as a structural problem. Short-period policy is necessary, but a short-period vocabulary is very dangerous to the service which economics can render. Even now, some of the catchwords are losing their force. The tests of rationalization are evolutionary

and not catastrophic. The War simply interrupted the evolution.

## III

It is when we come to consider industrial organization in its relation to present and future economy that we reach the more difficult aspects of the problem of sanctions. In the first place, we should be clear what is and what is not meant by free enterprise. It is obvious that industry is carried on in an environment of law, which imposes conditions on the manner in which all the factors of production become available. The Factory Acts impose social conditions; materials of production are affected by taxes and tariffs; the use of land by the laws of property. The law of Contract affects industrialists as it affects other people. Free enterprise does not mean that the State should not do anything that affects industry, and the existence of Factory Acts is of remote relevance to the question of the control of enterprise. Enterprise is the co-ordination, under the conditions on which they are available, of the factors of production. It is a question by itself how far the enterpriser should be free in the perfomance of *this* function. The State interferes with this freedom if it requires that an industry shall be organized on a certain scale of management, or that a certain scale shall not be exceeded, as being monopolistic. Freedom of enterprise is usually contrasted with such official interference. But it has also been taken to mean that producers have retained or should retain independence of each other. When, therefore, it is said that the period of free enterprise is over, this means either that the State is to prescribe conditions of organization, or that producers on their own account are to associate or combine. These are quite different ideas, though covered by the same expression. The latter means only that the unit of enterprise, as defined above, is taking the place of the unit of process; and this is a form of enterprise for which sanctions are not required. It is an exercise of the judgement of industrialists on matters of

industrial economy. It is different with the former; here the problem of sanctions cannot be evaded, because it means that authorities or influences not practised in industrial organization prescribe rules of such organization, or require rules to be submitted for their approval.

It should be observed that the prescription comes largely from sources where activities are carried on which would reject the prescription if applied to themselves. The authors of books, editors of journals, leaders of schools of opinion, furnish their services in quite un-rationalized competition with each other. A proposal to cartel these activities, so as to produce from the best 'plants' each special kind of opinion—foreign affairs from one, home affairs from another, odds and ends from a third—and overcome the overlap and duplication which exists, would not be tolerated. It is thought that the freedom of the Press, in every sense, would lose more than it would gain by such rationalization. Yet an influence on public opinion may be more important than a measure of change in industrial organization. If authors and journalists claim to know best how their own sphere should be managed, what is the authority on which plans for the organization of an industry can be suggested by, and are to be finally approved by, persons or official bodies who are outside that industry? This is the problem of sanctions, and of course it is specially acute in respect of parliamentary decisions affecting industry, because one parliament can carry them out, and another parliament can undo them.

There are two ways of approach to this question which ought to be barred, though they are in considerable use. First, the pretence of judging an industry by what is really a sort of philosophy. An industry consists of a large number of different producers. To rationalize an industry is to remove all the duplication and overlap which can be avoided, and introduce as much unity of purpose as is practicable without loss of economy. If we start to arrange or combine or supervise the work of the producers, this ends in the idea of some association or control which includes the whole industry. This is simply

the idea of the one in the many. Since private monopoly is dangerous, it takes the form of complete nationalization. This is not economics, but a pseudo-industrial philosophy. Sound arguments for nationalization must be more particular than that. It does not here matter whether the common control is by public ownership, or a semi-public Board, or a legally regulated private Cartel. These questions are subsequent to that of the most economic degree of centralization. Examples of the purely philosophical idea of rationalization are those statements which only point out the fact of multiplicity of producers, and of separate producing policies.

Second, the use of biological analogies. Here the question is one of appropriate metaphor. Metaphor is a form of illustration, not of argument. Some recent studies of rationalization, notably that of Dr. C. S. Myers, approach the question by illustrative metaphor.[1] For example, the biological fact of 'symbiosis' has analogies with rationalization of the Cartel type, in respect of the way in which special functions are combined in one system. If it is otherwise right to cartel an industry, the comparison with organic structure elsewhere is illuminating; and I do not suppose that Dr. Myers would go further than that. The biological, or organic, analogy was also freely used by Marshall, but it is not a proof or sanction of any type of industrial organization. In economics, survival does not show 'fitness' without further argument.

Trade practices are an important feature of the industrial phase in which rationalizing associations are seeking to maintain themselves against outside competition. They have great variety, and their use is often a perplexing problem of industrial ethics. The judgement upon them has to be mainly futuristic, relative to the rightness of the plan of rationalization itself as a way of economy. They are not justified by any of the three approaches to rationalization which have been considered—the retrospective, arising out of past risks, the philosophical, and the biological. In considering what is to

[1] *Business Rationalization*, 1932.

be done about any important trade practice, such as the rebate or the restrictive agreement, we have to know, not how the plan of association arose, or what similarities it has with other associations, but only what it is good for. The public sanction of any scheme of rationalization is presupposed in these controversies about trade practices. Then what are the grounds of this sanction ? Who knows any better than the industrialists themselves ?

## IV

The course of development of an industry is subject to the judgement of the community in three degrees of competence —as regards *policy*, *administration*, and *technique*.

It was a matter of policy that, during the war, some industries had to be dealt with as a whole. In Germany some Cartels were made compulsory. As a larger matter of policy, it has been thought right to cartel the British coal industry, and to institute similar schemes for agricultural products. Here the question is one of the fundamental nature of these industries, and the maintenance within the nation of a minimum amount of mining and agriculture. This has to be done by a plan which will include everybody, and exclude interference. It may not be the most economic way to provide ourselves with coal or agricultural produce, but it is policy to have it, with the further consideration of mitigating a decline in an established occupation. Policy may have reference also to the *prestige* of certain occupations, such as the iron and steel industries, or shipping, or agriculture itself. It may have reference to information, since planned industry can more easily keep complete records. It may be based on the supposed advisability of having a national organization which can bargain with similar foreign organizations for the purpose of international agreements.[1] It might be for the purpose of relating the industry to the policy of an Investment Board

[1] This is given the first place in the Iron and Steel reorganization Scheme (No. 63, 1933, p. 5).

if such were established. It might be in order to eliminate sporadic and disturbing trade practices, even if more systematic and regular ones were the result. The Sankey Commission states that some coal nationalizers 'would be prepared to face risks of financial loss or of lessened efficiency for the sake of testing the general principle'. These would all be types of rationalization policy, as regards which public opinion has fair competence to decide. It might finally be because of the dignity of having certain industries national, as is often urged in the case of the railways; or because nationalization of some degree would make for peace in industrial relationships.

Secondly, administration. The tests of administration are much less special than those of technique. The opinion of Parliament, and of publicists of all kinds, can have great validity in respect of this feature of organization. There are forms of specialism in administration which depend on the nature of the thing administered, and may not be of general application; such as specialization by line or by function. In manufacture as distinct from distribution, or one kind of manufacture or distribution as distinct from another, the proper kind of specialization may differ. But public opinion is fairly competent to judge on many aspects of industrial administration, and it does, in numerous reports, apply such tests. For example, directorates of very large size automatically increased by further absorptions of competitors; the amount of delegation of responsibility; the methods of accounting; the supervision of management; the local or personal responsibility of experiment; consultative relations with labour, or with related producers or distributors. General investigation can without presumption pass on the question whether an industry is organized so as to admit the best scope for these aspects of administration. Indeed, the criticisms of unrationalized industry usually lay emphasis on imperfections in such respects as these. In addition, there are such questions as proper receptivity for common services rendered to an industry, by means of information, transport, and research.

Before a public inquiry, an industry cannot escape on the ground of its technicalities from a wide range of valid criticism on such grounds.

Third, technique. In this respect this argument is subject to the very difficulty it is explaining. Presumably, technical questions do affect the optimum range of industrial organization, in both intensity and time. There is a first approach through the difference between cases where mass production is possible, and cases where it is limited by qualities of materials or varieties of products. The question of continuous process may affect scale of organization by the route of localization. It may be better to integrate vertically than to combine horizontally. How far the plants of an industry can be organized for specialist production, as against multiple production, may depend on cross freights. If a particular industry through its leaders says that some forms of rationalization, which apply elsewhere, do not apply to it, and the grounds of this are technical, then the public sanction of schemes of rationalization cannot be a confident one. The case of the two Commissions on the Coal Industry since the War shows this clearly; for it was partly by raising technical questions that the Samuel Commission rejected the rationalizing proposals of the Sankey Commission. Here public schemes are up against the authority of practice. The intensity of the public interest in industrial efficiency does not overcome this difficulty.

## V

If, therefore, the public interest in efficiency is to cause a proper intervention in the organization of industry, as regards technique and some aspects of administration, how does it derive its justification? The answer to this is simply evolutionary; apart, that is to say, from intervention which is based on policy, as described above. We can use the authority of practice so as to make it self-critical or mutually critical. This can be done in three ways—by industrial comparisons, by international comparisons, and by appeal to industrial

leadership. The two first of these are the grounds of evidence for the last.

As regards (1) industrial comparisons. It appears from recent researches that the competitive system has at all stages been accompanied by rationalizing proceedings, or associative efforts. They have not had the same scope in all countries, because monopolistic purpose is difficult to distinguish from higher organization, and in the last fifty years the latter has had to bear the suspicion of the former in some nations, especially the United States. But when one way is prevented, another is devised, for creating larger units of enterprise. The pace of this development is variable between industries, and is influenced by personalities as well as by phases of the industries themselves. Up to the War, the Trust leaders were generally unpopular enterprisers, but we are now joining on to where they had brought things by 1914. In the light of present ideas and conditions it may be doubted whether the legal attempts to restrain them were well based, except in respect of trade practice. The Trust and the Cartel furnished the ideas of rationalization in a completer degree than otherwise would have obtained, when post-War measures had to be considered. Now the pace has not been the same in all industries. In respect of an established industry, like cotton spinning, it is fair to consider its whole organization against that of another industry which has gone far with higher organization, like chemicals or oil. Cotton-spinning has resisted the publicists' ideas of rationalization, and on its managers may be turned the criticism of what has been possible elsewhere. Since many great industries have proceeded to work in large units or associations, this may be called the sanction of general industrial tendency. The larger the number of industries which have found rationalization possible, the less probable the reply that in any particular industry there is an obstacle in technique. The suggestion becomes possible that management is deficient in the enterprise of association. At the present time the cotton and iron and steel industries are

under warning to reorganize, and coal has had an organization imposed on it; these conditions could hardly have been reached but for the impulse given to public opinion by pre-War and post-War changes of system in other industries. It may therefore be said that the first sanction of public rationalizing policy is *general industrial tendency*. This is not the application of inexpert ideas to an industry, but the use of a form of expert evidence, the experts being in other industries.

Next comes (2) international comparison. Why is something not being done here which appears to be successful in other countries? This is again a method of turning on industry a criticism derived from industry. Such criticism is of course limited by variations of national circumstances; provided that the psychology of industrialists is not taken as one of these circumstances. We have derived our impulse towards agricultural reform mainly from foreign examples. The Agricultural Tribunal of 1922 was set up 'to inquire into the methods which have been adopted in other countries during the last fifty years to increase the prosperity of agriculture . . . , and to advise as to the methods by which these results can be achieved in this country'. As regards general industrial tendency, agriculture could claim to be a special case, since joint-stock had very little application to it. This claim has usually been conceded, on the ground that close relations between the persons engaged in the industry, and between them and their live stock, are essential to the idea of farming. Hence the unit of production has remained, in comparison with manufacturing industries, small; and this is thought to have affected adversely enterprise in agriculture, since there are few positions of great responsibility to which the farmer can aspire. But agriculturists in other countries perceived that the proper method of organization was in co-operative buying, selling, and credit. On this comparison, there has been a long-standing criticism of the lack of associative enterprise in British farming. This was met for a time by the argument from variation in the national conditions as they affected

even marketing; but it is foreign example to which we owe the passage of the Marketing Act. More recently, iron and steel production have come under the same kind of rationalizing impulse;[1] and the draft scheme submitted to the Import Duties Advisory Committee accepted the test in what may well seem the tardy concession that 'if foreign analogies are to be trusted, further consolidation of the industry, both by way of horizontal groupings and vertical amalgamations will be found desirable'. Two circumstances affect this sanction of policy. The phase of a national industry may vary from that of a foreign one, by localization, relation to markets, and amount of variety of its products; the English cotton industry has thus been strongly influenced by a belief in its own uniqueness. And international comparisons often cancel each other out. Until recent years America did not have Cartels, or Germany Trusts; the kind of agricultural co-operation which succeeds in Denmark is not the kind which is prominent in Germany. There is no doubt, however, of the great part which the foreign sanction plays in the schemes of British rationalizers. Trusts, Cartels, and rationalization itself are words of foreign origin. England has had no word of her own except 'carrying-on'. It had enough Trusts at the beginning of this century to be the subject of inquiry by the American Industrial Commission, and later by the Federal Trade Commission. But the best known of them were in such servicing industries as the dyeing of fabrics or the combing of wool, and others, like salt and cement, depended on local monopoly of supply. It is for the whole impulse toward higher organization in our most competitive industries that the pressure of foreign example is now being applied. This country preferred to let enterprise take its course, relying on free trade to counteract the dangers of monopoly; and there was before our eyes the spectacle of the 'Trust Problem' in its successive phases in

[1] *Report of Delegation on the Industrial Conditions in the Iron and Steel Industries in France, Belgium, Luxembourg, Germany, and Czechoslovakia* (Cmd. 3601).

America since 1890. It is otherwise now that we see the solution of that problem in Germany and America in the combination of the magnate, with the advantages of economic strength, with legal control of trade practice. The international comparison is one of types as well as one of methods. The pre-War arrangement was that Germany had only Cartels, and America only Trusts. Since the War, Germany has adopted the Trust or fusion of interests on its merits, though without abandoning the Cartel as between separate enterprises; while America's recent adoption of Cartel policy is of the nature of an emergency measure. In this country the idea of rationalization is also one of fusion of enterprises, the Coal Cartel having been set up as a shelter within which that result can be fostered. This explains why there is such a thing at all as the rationalization movement in this country, in spite of the finding of the Committee on Trusts of 1919 that in every important branch of industry there was an increasing tendency towards trade association. These were predominantly price-fixing agreements. The germ of the impulse of foreign comparison was seen in the conclusion of the Committee of 1917 on the Iron and Steel Trades after the War, which said that 'the individualism of the British character has often led the manufacturers to retain personal control over a small and relatively inefficient works, rather than pool his brains and capital to the greatest advantage of the industry.... Immense consolidations of capital are the normal form of industrial organization in America and Germany, but are non-existent in Great Britain.' This was clinched in the conclusion of the Committee on Commercial and Industrial Policy after the War, which said in 1918 that 'the attitude of public opinion, of local Authorities and of the State which, broadly speaking, has hitherto been more or less avowedly antagonistic to the very principle of combination, must be modified'.

These quotations lead to the vital question of the third sanction of policy, the *appeal to industrial leadership*. This arises out of two things, the special expertness of industrialists

in their own sphere, and the economic era on which general politics has entered. The committees which have just been quoted were mainly composed of leading men in industry. It would seem to follow that, if there is a drag on the policy expressed, there is a difference between the ideas of leaders and of the general body of producers. In the proposals to reorganize the spinning section of the cotton industry, this difference became clear. An industry like agriculture scarcely has leaders at all. But the range of rationalizing plans can hardly have sanction without the endorsement of those who are of recognized authority in the administration and technique of an industry. In the fundamental industries such persons are well known. The sanction is positive in that their consent should be enough, the other sanctions being supposed in force. If the rank and file support them, so much the better. The serious issue arises if such leaders do not support a plan, or are divided about it. This was the case as regards the reorganization of the coal industry.[1] An ocean of statistics cannot drown the judgement of the expert in the particular sphere. Such persons are aware of general industrial tendency and of foreign practice. Besides, they have to work any plan that is devised. The problem, failing this sanction, becomes one of a sort of margin where public interest, theoretical analysis, and expert practice touch each other. The matter may be removed into the sphere of policy, as nationalizers would do. If private enterprise remains, the failure of this sanction may lead to experimental plans, or to official decisions on the strength of the other sanctions. The Coal Act was of the latter kind.

## VI

There is one form of the argument on sanctions which requires a special consideration. This is the argument derived

[1] This issue is made quite clear in the *Report of the Coal Mines Reorganization Committee*, 1933. The Mining Association held that the *range* of amalgamation was a question for the industry. (P. 25.)

from the industries which are called the public utilities. It comes from the facts that these are both worked in the form of local monopolies and are to a large and increasing extent conducted by public authorities. They render some of the most essential services of the nation. It has been held, therefore, that when we are considering the right policy to urge or impose on industry generally, there is an example before us in the manner in which our supplies of gas, water, electricity, and transport have already been organized into single services, locally or by large groups, a result which no one questions or would seek to reverse. In its aspect of public management, this precedent is the 'unconscious Socialism' which was underlined nearly half a century ago in the Fabian Essays. It might be regarded as a particular case of the use of the sanction of general tendency. The argument would be of this nature that, when there were single authorities ready to administer these industries, the administration has been so successful as to show that it is single authority that is wanted to obtained the same results in the industries at present competitively conducted.

With a full admission of the importance of what has taken place in this sphere of enterprise, I do not think that it is in the class of precedents or sanctions from which we could argue to results of the same degree for even the most developed of the great fundamental industries that are still private and competitive. The point is a very important one, in both theory and policy. If I were an anti-rationalizer or an anti-Socialist, I would feel conscious of and have to admit the danger of seeking to prove that everything which points the other way is always to be argued away as a 'special case'. But I do not think that what follows is merely captious objection. It belongs to the precise study of rationalization to emphasize a difference between the public utilities and the industries which supply freely transferable goods.

The special economic feature of the great public utility industries is that their fixed plant has to be coextensive with their market. The consumer of gas, water, or electricity has

that plant brought into his house or factory, and uses the goods delivered in connexion with it. The goods are for that reason non-transferable. This in turn means that between plants in different places there is not competition, for example between the gas produced in London and that produced in Manchester. The prices may vary greatly without any power of the consumer to substitute the cheaper for the dearer. There is local monopoly, and these industries have been defined as the 'natural monopolies' of a country.

These public utility industries differ again from the railway industry in that they are more strictly industries, and not only services. They produce and deliver. Their fixed plant delivers only their own goods, and each kind of plant delivers only one commodity.

The result of these peculiar conditions is twofold. In the first place, the tendency to monopoly is exceedingly strong, even on strictly economic grounds. The wastes of competition would not be a question only of the commodities produced, but would mean, for every extension of commodity production, a corresponding increase of the fixed plant. This in turn means an increased demand for 'land' or rights over land, an expensive thing in urban areas. The risk of a new competitor against an existing one, if we try to conceive such a thing, would be prohibitive.

But in the second place, these requirements of land are such that it is not policy to give unlimited rights for the competitive use of the public domain. The natural monopoly has to be restrained by other means. A number of companies cannot be allowed to turn up the streets in order to lay or maintain their fixed plants.

The restraint on monopoly now increasingly takes the form of the public ownership of these industries. It would indeed be simplest to explain the kind of rationalization which these industries have by starting from the side of policy in respect of public domain. To this is added that these industries, having no competition with similar industries elsewhere, have

to a large extent the features of administrations, and are to that extent more suitable for public management.

Railways, being common carriers, are not in quite the same condition. There are some obvious similarities in respect of local monopoly and the nature of their plant. These create railway systems, and in relation to foreign service the whole system has monopoly. There is some continuity from the public utility industries, through the railways, to general industry, because of the productive departments for equipment which railways own. The range of rationalization of the railway industry appears therefore to be a complex of the problems of general industry and problems of domain.

The point of this discussion is that we are in a different field of circumstances when we are considering the range of organization appropriate to the industries which supply their own transferable products in markets where the nature of their plant gives no natural monopoly, and which have to find the scale of operation that can be most efficiently worked when management has to meet these requirements of uncertainty and enterprise. It is agreed, in both theory and practice, that there is a scale which is the best in that it eliminates a measure of the uncertainty without proportionately complicating the enterprise.

We do not know what that scale, or degree of planning, ought to be for any industry, and all that belongs to policy is to keep active the three kinds of appeal to practice which have been called sanctions. The unitary planning of the public utility industries is not a valid sanction for this purpose.

## VII

But it is not possible only to have the assurance that the great industries have the proper amount of range of control, or of planned operation. A national policy has also to ensure that they continue to be what they were meant to be, and that the strength of their high organization is not used so as to be

restrictive on enterprise, especially on new enterprise. Hence the question of trade practice is an essential supplement of the study of modern planning or rationalization. Towards this question the attitude of publicists and economists in this country has been very passive and careless. The conception of competition, as usually studied, is too simple. It is not merely the ability to sell at a certain price, or even also the use of any advantages which a business finds *given* to it by local differences in the market. It is one thing to take such advantages of limited monopoly, another thing to make such advantages in order to take them. It is this latter kind of action that makes the problem of trade practice, to which much attention has been given in connexion with the rationalizing movement in America and Germany.

Even in competitive business, an established enterprise has some degree of monopoly. It has not a random relation to the custom of the market. It obtains a goodwill, because it is convenient to buyers to have regular relations with their sources of supply. 'The first principle of trade', says an old expositor, 'is to supply a regular and known set of customers'.[1] That degree of monopoly does not mean more than regular connexions; it is beneficial in that it lessens the risk of business. It does not in itself imply an elasticity of demand for the supplies of a particular business different from the general elasticity of demand for these goods.[2] A difference in the particular as against the general elasticity of demand is caused by various kinds of preferential trading, with relatives, nationals, small producers, con-denominationalists, or co-operative societies; or by an 'ill-will' against monopolistic businesses. In all these cases, even the last, there is still alternative to re-contract for the whole of the desired supply on conditions which are relied on to continue. The main sphere of trade practice is where the economic strength of producers is used to create differences in the market, not

[1] *The Wealth of Individuals*, by T. Corbet (1841).
[2] Marshall, *Industry and Trade*, p. 182.

existing necessarily, from which they believe that they can specially profit; to make risks in order to take them.

The basis of a policy about trade practice is twofold: that it is thought desirable to set up large amalgamations for the sake of regulation, and that it is also desirable that old or new outside enterprise should continue for the sake of freedom and stimulus. This is the general feature of rationalization. When amalgamations are set up, that stage is over, but the kinds of practice which may be adopted must still be a matter of supervision in all industries where technique changes and affects management. This problem is clearly set in the draft plan of reorganization in the iron and steel trades. 'Assuming that at the outset all substantial producers of pig-iron and a good majority of the manufacturers of secondary producers join the proposed Corporation, it would be able to exert pressure on any opposing section by suitable rebate schemes. These might provide on the one hand for preferential prices for supplies to members of the Corporation, and on the other hand bind purchasers by means of special rebates to take only products of the Corporation.'[1] Now this is one of the practices that are specifically forbidden by the Clayton Act of 1914 in the United States. In this country it created the continuing sharp controversy between the Shipping Conferences and the tramp trade. It is evident that an organization proposing for itself powers of this kind may use others that are similar; and though the problem of trade practice is a difficult one, we have not rationalized if we do not keep hold of it.

This may be otherwise put by saying that, if there is to be an interested public attitude to the course of private enterprise, instead of, or in anticipation of, any of the forms of Socialism, it has to keep in view three things—higher organization, monopoly, and trade practice. By the use of trade practices, the first of these, which is intended, can pass into the second, which is not intended. Though the effects of monopoly may be concealed, they may easily be greater than those due to matters

[1] No. 63–9999 of 1933, pp. 6–7.

that agitate public attention, such as changes in wages, taxes, or rates.

Trade practices, then, are methods adopted by private enterprises to limit the access of other producers to the consumers, or of consumers to other producers; or to create in the market local or temporary conditions of prices on which all business could not be profitably conducted. Many of them do not belong specially to the conduct of industrial competition, being simply malpractices applied in that field, such as bribery or inducing breach of contract. Those which are specially in question in industry depend on two things: first, strength of bargaining; second, the direct use of resources. Both of these powers are so much increased by large or combined enterprises that they become an aspect of the problem of combination. For it is the large combines which can limit the access of consumers to rival producers by threatening not to deal, or only to deal on worse terms, with buyers who do not deal exclusively with combines, or do not give preference to the combines; and it is also large combines which can employ their resources to trade at certain places or times at a loss, for they can go on losing longer than the independent rival can. A definite policy of urging or enforcing large amalgamations, therefore, requires safeguards against the misuse of economic strength.

For example, there is no doubt that the opposition of public and economic opinion to the claims of the magnates who founded the pre-War Trusts and Cartels was due to a great extent to what came to be known about the practices they used to maintain these kinds of enterprise. These organizations furnished a new chapter in competitive methods, though ostensibly founded to meet abuses of competition.[1] It became necessary in America, by the special legislation of 1914, and in Germany, by Decrees of 1923 and later, to prevent a number of practices by name, and to take general powers as well. There is no similar statutory supervision in

[1] *v.* Stevens, *Industrial Combinations and Trusts.*

this country. Suggestions to take supervisory powers have often been made, and they are much more relevant now that we are not discussing Trusts as a problem, but trying to get them formed, at least in some fundamental industries.

A 'higher organization' in an industry looks the same from the outside as a monopolistic construction. It might be supposed that a really economic reconstruction would be defined by its power to carry on without the use of trade practices, and that these in themselves show failure to reach competitive efficiency on the basis of costs. But the outsider, in relation to a higher organization, is also an ambiguous person. He may be a straightforward competitor bringing in new methods and ideas. But he may be a person who exploits the regulation to which the members of a large organization are made subject. And in doing so he may falsify the appearance of the economy of organization. He may seem to be doing something that is profitable to himself and to the consumer, though his argument would disappear if every one acted like himself. For example, a price-cutter may extend his own trade in a regulated market. By the volume of business which he gets, under these conditions, he may be able to continue to undersell, and to make the regulated price seem excessive. Yet the prices at which he can get his supplies are what they are because his supplier is mainly depending on the steady demand of the regular sellers. If there were no regulated market, he could not get the buying prices which the regular organization makes it possible for his supplier to sell at. Therefore, the use of trade practices to defeat outsiders does not necessarily mean that those who use them are substituting improper devices for straightforward competitive efficiency.

As a special case of this, there is the condition of an industry which has had to recover from exceptional difficulties arising outside itself. The post-War question of reconstruction is of this kind. Excess of capacity has been created, either by wartime expansion or by foreign reactions. Recovery may mean that the excess of capacity cannot be quickly cleared

off or made rentable, so that, by any plan of reconstruction, charges on account of idle capital have to be carried for a time. Import duties may be imposed to give room for such reconstruction, but the domestic outsider is not entitled to the advantage of a fresh start, if he uses it to undersell. Even if they are called boycotts or restrictive agreements, the methods adopted against him are not then unfair practices. The simplest way to reorganize against this is to abolish the outsider, as in the British agricultural plans. This may not always be done, or be the best thing to do. Therefore, there will be right and wrong trade practice, and the tendencies of opinion and of evolution are making the subject more important than before, if we look ahead, and if private enterprise is to be typical for a while yet.

Therefore, sanctions of rationalization must be referred to the conditions which exist, or are made, to ensure, as far as possible, that what are formed or urged or allowed are what will continue to exist, namely better organizations for efficiency. New enterprise must have means of living with strong combines, as long as we do not know the future of technique.

So far as can be judged by the history of the cases brought into the courts of this country, the issues of trade practice are not all of a kind which can be decided by general legal considerations. There appears to be a fourfold classification of these issues.[1] First, some practices, like bribery or defamation, are against good conduct in any sphere, and can be decided at Common Law. Second, there have arisen questions of motive, and these enter the economic field of intention to create 'pernicious monopoly'. Third, questions of results, where it is plain that economic inquiry is essential. Fourth, questions of interpretation of economic relationships, where the problem is whether what is being done goes beyond what any one ought to expect who goes into competitive business; or alternatively, what would follow by parity of reasoning if

[1] These are discussed at more length in my Introduction to the English translation of Liefmann's *Cartels, Combines, and Trusts* (Methuen, 1933).

the practice were allowed or prevented; this is an aspect of what has been called in an earlier Essay the 'previous question' of industrial enterprise. So far as a layman can judge, the courts of this country tend to favour the last kind of decision, and especially to disclaim their competence to deal with economic results.

But, by the sanction of foreign example, it appears justifiable to endorse the finding of several inquiries, dating from the Committee on Trusts of 1919, that the continuance of private enterprise under the conditions that are coming about will require resort to some tribunal on trade practice which will deal specially with their economic aspects. On its relation to the ordinary courts, and the degree of its authority over practice, I do not pretend to be competent to decide. But there is important foreign experience, and a notable plan in America for voluntary conferences to regulate trade practice, within the scope of the Law, and under the supervision of the Federal Trade Commission.

The other method of procedure is by special inquiries, according as particular problems of trade practice turn up anywhere. In this country the retail and shipping trades have had such investigations. I suggest that the reference to such investigations should be wide enough to get to the principle, not only to the method, of the practice. For example, gift coupon trading has recently been a serious issue between established enterprises, or combines, and small traders; but the essence of the question is gift trading, whether by coupons or otherwise. Again, I suggest that the interpretation of 'public policy' in this respect should include two things: whether the practice is one which, if it had not existed, it would have been desirable to introduce, and whether, since it exists, it is desirable to prevent it.

The purpose of this Essay has been to place ideas in order, and I realize that this means dealing in a general form with a subject that is full of detail. But this has to be done, for the era of economic politics does require the straightening out of

ideas. It is to be understood that the use of such ideas always means investigation. A blank refusal by the leaders of an industry to consider any kind of plan is a different thing from their opposition to findings by inquiry. Due weight has to be given to the sanction of policy; at present it covers a large part of rationalization, up to nationalization. What is policy is often likely not to be also strict economy. The grounds of policy are very diverse, but all policy has to be distinguished from the mere philosophy of planning, the creation of unity in diversity, which is not enough for economics. We have to argue in each case the margins of policy and the more strictly economic factors. The argument is centred on the right amount of association in industry. We have to be as sure as possible that the higher organizations which are either set up or allowed to set themselves up will continue to be what they were meant to be, and this is the reason for an effective code of trade practice. The whole of this point of view, difficult but necessary as it has been to state it, is expressed in the title of this Essay.

III

# ENTERPRISE AND THE TRADE CYCLE

[There are various ways of approach to the problem of the trade cycle. In this Essay certain new indices are supplied. There are deductive and historical explanations, tracings, and theories of contingency. Fluctuation has to be distinguished from mere variation about an average, and from tautologous expressions. Some indices of a fluctuation are more fundamental than others. Those which are here discussed are employment, prices, and enterprise. It is at points of reversal that the relations of the indices are most important and most legible. It appears that, during the special 'trade-cycle era', the priority was with the factor of enterprise. If so, this may contribute something to the question of a policy of recovery from trade depression.

In its negative aspect of business failures, the relation of enterprise to the cycle is not so clear, and on the whole is contrary to what might be expected. Statistics of insolvency in this country are presented for the first time, and a tentative argument is based on them.]

IT is not to be expected that the course of trade or industry would be regular, since any regular line is of all courses the most unlikely to be followed by any of the indices of movement in a complex system. But the trade cycle is not merely a fact of irregularity, as will be argued below. And for that reason it is not merely the barren statement that relatively good trade must succeed relatively bad trade. We can admit as indices of such cycles only those which show beyond doubt the phenomenon of periodic fluctuation over intervals of time which allow for the development and exhaustion of influences that have been set up.

It is possible to suppose many reasons why there might be a fluctuation in industry, and why, once set going, it might repeat itself. Thus a number of analytical theories of cycles might all be quite valid. It is obviously unlikely that a succession of cycles would occur each of which was to be explained by a different one of the possible analyses, and therefore any analytical explanation endeavours to apply to the whole succession of cycles, and therefore it endeavours to include in its explanation some tendency to continuous development

on its own basis of explanation. Thus one cycle is not explained by an alternation of business psychology, and another by technical causes of unequal rates of investment. Analytical theories have to include recurrence, so that each is a general theory of the whole process.

It is because a number of lines of analysis are possible, each of which might be consistent with itself, that the range of explanations has to be limited by the realistic study. This limits the sphere of economic imagination, without which limitation many new groups of Economic symbols may explain cycles which they themselves generate. It is an economy of effort to explain what has happened, rather than a number of things which might happen, provided it is explanation which is offered, and not only what might be called *tracings* of the fluctuation. The deductive or analytical approach is in fact subject to a statistical problem in this sense, that it is unsecured unless we are sure that the number of such possible approaches has been exhausted, and we can never be sure of this. Besides, the evolution of industry may still have an indefinite future before it, even on the basis of private enterprise, and the trade cycle may wither up and become an episode, and this will be very embarrassing to strictly deductive explanations of its necessity in a system of enterprise. Again, the study of trade cycles has, or should have, the practical purpose of alleviating their influences on unemployment; confusing policies may arise out of a number of analytical possibilities, whereas the most direct approach to remedies is through the interpretation of the existing cycles and the study of the priorities which its indices show. I do not, therefore, share in the disparagement which some writers show towards the 'laborious and well-meaning, but misguided', elaboration of the statistical indices and their relations to each other; and this paper is an endeavour to determine the priorities further.

The methods of treatment appear to divide themselves into deductive and historical explanations, tracings, and what may be called contingencies. Invention, for example, is a con-

tingency; so are harvest conditions, if they depend on weather, and if agriculture is taken out of the ambit of the influences on business as a whole; otherwise, agriculture comes within the general interactions of the process, since industry is a circular system, not a linear one, the primary industries depending for their resources on the finishing industries. The contingency theories differ from those which give up any explanation, and say that any cycle is an occurrence which might not have happened, and may not repeat; or define it tautologically as the necessary sequence of the better on the worse. Contingency theories bring in a cause from outside industry, and seek to explain a recurrence of these causes. They require the cycle to be continually fed with what Professor Fisher calls 'starters'; once you can get the starters, the cycle is self-developing, through business influences which are quite easy to follow. It appears to me that Marshall was among the contingency theorists; he requires a contingency which will have an immediate influence on credit, and then follows the tracing; though he also, and characteristically, uses phrases which absorb the contingency in the tracing, by 'the mere passing away of old causes of distrust'.[1] When contingencies are not assumed, the account of the cycle may either become merely a tracing, which gets into trouble at the periods of worst trade, and jumps this by more or less vague expressions which amount to the fact that revival somehow begins again; or it becomes self-developing, in that the forces of change at critical points are given in the necessary breakdown of some factor—say credit, or distrust.

It appears to be the general assumption that tracings have their main problem at the time of depression. It is usual to read the cycle from one such time to another, and not from peak to peak. The upper turning-points are taken as forced, while the lower ones have to be induced. If we can explain revivals, these various interactions of prices, costs, and credit will lead to a jamb or disequilibrium without any further

[1] *Money, Credit, and Commerce*, pp. 249–51.

explanation, and the break-down called a crisis will be an automatic part of the tracing. But we have to dose the process with something new in order to start another cycle. I think this is a fair account of a usual compromise between self-generation and self-development of trade cycles; it is perhaps the commonest presentation of all. But this is still rather contrary to the most reasonable expectation. It is true that industrialists want good trade to continue, so that its break-down is likely to be in some way forced; but they want bad trade to stop, and is it therefore necessary to go outside the chain of influences to find a 'starter', if business enterprise is one of these influences? One writer suggests that there are at all times numerous conditions existing such that, with the variety of industries, *some* of these are favourable to *some* revival, and that the revival will come by a sort of selection of conditions favourable to some producers or traders, or at least relatively favourable; a point of view not dissimilar from that required by Darwin to explain the origin of variations. But the theory of the cycle is more complete if the causes of variation are inherent, for then the tracing becomes an account of self-development. Now the inherent condition on which this paper seeks to give new evidence is simply enterprise. For, if my investigation is correct, it appears that at all turning-points of the trade cycle, enterprise has had priority over the other primary indices, and that the changes upward or downward have depended on the prescience of enterprisers.

Of course, one can go behind that, and analyse it further; but I am at present content with this proximate result. Further, such a result does not mean that private enterprise is adequately carrying out its function. Even if enterprisers have shown prescience of the conditions, favourable or unfavourable, which obtained at the critical points of trade cycles, this does not absolve the system of private enterprise from the charge of a deficient business memory, or an insufficient rationalization of business competition. In a later

Essay an attempt is made to decide the incidence of the trading losses due to their imperfections.

There are some aspects of the fluctuation which appear to have had insufficient definition, and something has to be said on what may appear to be elementary points. But it will be seen that they still require statement, in order to make the subject-matter precise.

In the first place, the norm or average or base-line about which the fluctuation takes place, and by which some aspects of it are measured, is not to be considered as in every respect normal. In a sense, both high prices and low prices are normal to the conditions in which they occur. The base or trend line of a fluctuation is not something given in advance, from which the indices vary; it is derived from the actual positions which the indices take at successive times. The real facts are those of the fluctuation. It is not to be supposed that in the course of the fluctuation a halt could have been called at an equilibrium position, and that the forces then acting could have kept an equilibrium there only, and not anywhere else. The tracing of the cycle shows the continuous development of interactions, till they get into such a disequilibrium as causes reversal; but they have always been in disequilibrium. If the cycle were smoothed by better public or private arrangements, it would not then necessarily have the trend line which it had while the fluctuations continued; these policies would affect enterprise itself, and the norm of progress might quite well be changed. For example, had the cycle been controlled in the fifty years before the War, it does not follow that unemployment would have simply been more steady about the same average of 4·4 per cent. On the contrary, the main argument for control is that it will lessen the size of the 'standing pools' of labour which wait about industries because they can be employed there in active periods, and will enable the labour market to have a better long-period organization. It is the actual fluctuation which defines the norm, rather than the other way about. When that fluctuation is crossing the

average it defines, it may quite well be in greater disequilibrium than anywhere else, though it is not in a disequilibrium of reversal. We cannot properly say that when unemployment is beginning to be less than average, or bank-rate greater than average, that is the time to attend to the controls. Long-period controls are by the route of general industrial or financial changes of method, and it is a matter of detailed analysis when short-period controls are likely to be most effective. There are those who think, for example, that the nominal rate of interest should begin to be adjusted to the real rate quite soon after a revival of trade, and before too much boom momentum has been gained. The disequilibria in which we are mainly interested are those of crisis and depression, the disequilibria of reversal; because it is by bending a skein that we see the relations of its threads to one another. But we must be careful about describing these bending places as the most abnormal of the conditions of the cycle.

Another matter of interpretation may be approached through a remark of Professor Cassel. He says that

> 'if we start from a curve representing an average rate of progress, actual development naturally must be represented by a curve that alternatively rises above and falls below the curve of uniform development. This is logically involved in the very conception of an average rate of progress. The existence of such a wave-like motion, therefore, does not require any particular explanation. I should like to underline that. It is obviously useless to undertake a tremendous work to discover a general explanation when in fact no such explanation is wanted.'[1]

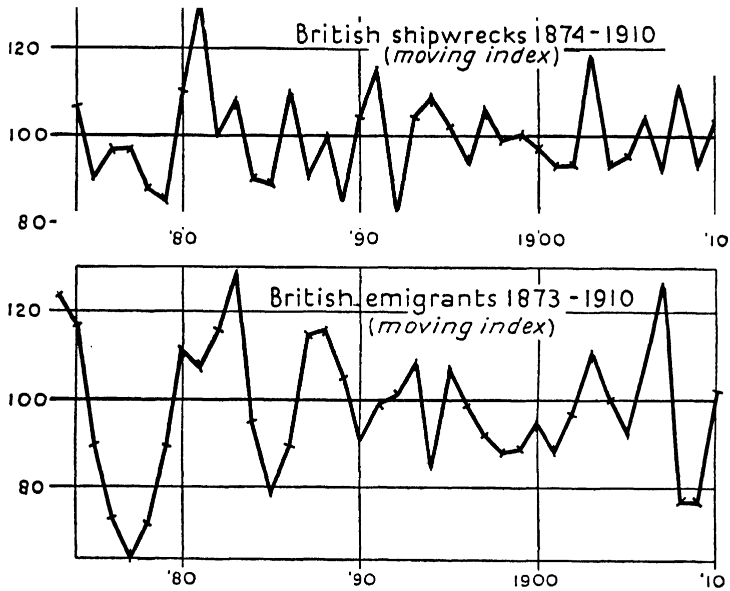
Now, it has been said above that the relation here described of the average curve to the fluctuations seems to me dubious; I do not think we can reckon the average curve from two terminal points alone, since it involves all the data of the fluctuation for its definition. But, apart from that, is the cycle only a fact of arithmetical manipulation? It appears to me that all that will follow from irregular movement about a

[1] *The Crisis of the World's Monetary System*, p. 35.

line of trend is that the sum of the indices above the trend line will be approximately equal to the sum of those below it; the approximation depends on how the trend line is calculated, whether a total average, or a moving average, or some other. But this equality of plus and minus does not define a *fluctuation*. It is unlikely that any theoretical economic problem would have been set if we had only had an historical irregularity of prices or employment. What drew attention was something more than this. It would help to the perception of the trade-cycle problem, therefore, if we compared the fluctuations which gave rise to the problem with other variations about an average which we do *not* regard as fluctuations. Of these, I have taken two—the history of shipwrecks of British ships, and of overseas emigration, during the same period as that of the trade cycle. The figures and graphs are appended. Shipwrecks depend on random chances of weather, and they have a downward trend, due probably to the substitution of steam for sail, and of larger for smaller vessels. When the relative movement is obtained from a seven-year average, the curve which results would not be regarded as a fluctuation. It has eighteen one-year changes of direction in the thirty-seven years for which there is an index. Emigration is believed to be the result of conflicting influences, partly distress at home, but partly also the enterprise which makes some people seek new countries. Its curve shows some tendency to fluctuate, but with strong interference. The difference is quite marked when we compare either of these with the curves of unemployment, relative prices, or enterprise. With much respect, therefore, to a distinguished authority, I do not think we can eliminate the trade-cycle problem on this purely arithmetical ground.

How then do we define those curves which are held to show fluctuation? The idea is fundamentally a physical one, a law of the displacements of masses, and of the compensation which, mass being constant, one variation must have in a contrary variation. The whole mass cannot find equilibrium on the

level of the variation of parts of it. But I do not think that these definitions of a uniform mass in relation to its changes can be fully applied to a system of complex interactions of many factors, although there is some room for analogy. Therefore, I take the following to be necessary conditions of what




may be called a 'good' fluctuation. Firstly, that the index studied does not change its direction, from greater to less or conversely, between two successive values which are taken as turning-points of the series, that is, between a maximum point and the next minimum *which we take as such*; and this means that the index may have to be corrected for any minor variations which we know not to be relevant to the index that is being studied, such as seasonal changes in a long-period index. Second, that between such successive maxima and minima the index crosses the base or trend line; this is obvious. Third, that the envelope of the successive high points, and that of the successive low points—the curves drawn freely through these points—are related to each other by convergence,

parallelism, or divergence. This is a difficult condition to satisfy in most actual cases, and especially in those cases where an index can have greater variation in one direction than in another; for instance, the index of unemployment cannot go below zero, and has a practical minimum above this, but may vary upward indefinitely, and the downward movement has more resistance than the upward. In a relative index, the fluctuation can be more free. While this condition is one of the perfection of fluctuation, it is nevertheless to be included in the definition. Fourthly, there has to be a period of time between successive critical points such as is adequate to the idea of the development of an influence. These four conditions distinguish fluctuation from irregular variation, and they cover what we mean when we say that industrial fluctuation suggests the problem of a cycle.

To pass now to a consideration of the actual indices which justify the search for explanation of a problem. A number of indices have been included by Beveridge in his well-known description of the 'pulse of the nation'. But all of these do not seem to me to rank as primary and independent. It would be agreed that the indices of prices and unemployment must be taken as primary and independent; independent, because it does not follow that high prices and high employment go together. High prices may be restrictive of production and employment; and if, on the contrary, they go with good employment, such a direct relation is suggestive of the fact that fluctuation is concerned with changes that arise from the side of demand. It is doubtful whether bank rate should be included among primary indices. If that rate was administered mainly in order to protect the gold reserve, it is not surprising that it should vary directly with prices, for reasons which are obvious; if it was administered for the purpose of a business control, it would be a more independent index. In the period here studied, out of which the trade-cycle question specially arises, I think that the former was the case. I do not, therefore, take bank rate as an independent index; it had to do what it

did because of the price index. Also, I would place among secondary indices, and out of consideration for general interpretation, such indices as the marriage rate, or the per head consumption of certain staple articles like tea and beer. These do not contribute anything new to the understanding of the conjuncture. If there is more employment, people will marry more readily; if there is more production, of which employment is the index, they will consume more. Again, some indices are secondary in the sense that they count over again what is already included in a primary index; thus the capitalization of joint-stock companies involves prices.

It is plain, however, that we ought to obtain if possible some index which is a direct measure of enterprise itself, for both prices and employment must be expected to result from some condition of enterprise. In the absence of any data which expressed enterprise directly we would have to depend on employment as the nearest effect of it, and so to lose the observation of any interval between changes in enterprise and in employment. But the significance of the trade cycle may be shown first in such intervals, that is, in the priorities of the fundamental indices. Do revivals of enterprise follow rising prices, or cause them?—or, at least, did they, in the period when the cycle was working as a regular phenomenon?

In his statistical chapters, Aftalion made use of the increase in the paid-up capitalization of the joint-stock companies which were actually on the register.[1] Other writers on the subject have left this source of information alone. My reasons for not using the figures of capitalization are (1) that we only have them since 1884 in regular sequence, and this shortens the run of the evidence; (2) that prices are involved in capitalization, and the index of enterprise, for comparison with that of prices, should be independently calculated; (3) that the increase in capitalization is a net result of company formations and liquidations, and it cannot be assumed that these are both regularly related to the trade cycle; it will be shown later

[1] *Crisis périodiques*, Bk. II, ch. 8.

that the relation of liquidations is irregular; (4) there are some difficulties, arising out of administrative causes, in interpreting the statistics of all companies which are returned as operative. These will be referred to later.

The figure which I have adopted is simply that of *new* company enterprises. We have no similar figure of the number of other new businesses. It is therefore an assumption that, after 1860, the formation of new companies represents the trend of all enterprise; and also that the number of new companies, without distinction of their size, shows the spread of the influence of trade conditions on enterprisers, and is a measure of economic stimulus. The justification of these assumptions can only be in the result. It will be seen that an index thus derived has a fluctuation so clear as to confirm both the cycle and, by simple probability, its own validity. An independent witness whose evidence is corrobative is thereby himself corroborated.

Indices are (*a*) direct or relative, and (*b*) rates or magnitudes.

The number of acres of land under cultivation in an old country is a direct index; the whole area is fixed, and the variation in the cultivated area is thus an index of certain influences bearing on national agriculture as a whole. With the growth of population, that area has shown an irregular decline. But most figures of quantity are likely to increase with the growth of population, and the latter influence can be eliminated in two ways: either by taking the percentage annual change in the given figures, or by turning them into figures of relative magnitude. By the latter method, the actual figure for any year is made a percentage of the figures for a number of years of which it is the centre, and, therefore, preferably for an odd number of years; and this appears to have the advantage over annual percentage increases, that it has a more stable basis. The number of years which should be averaged in order to obtain the relative index for any year may be obtained from any direct index which has no trend; it so happens that the unemployment index has only a slight

trend, and has a fluctuation round about seven years, so that the index of company enterprise to be compared with it is based on a seven-year average.[1] The relative indices so derived are static indices of magnitude, not dynamic indices of growth; the dynamics have been eliminated to give new figures of size. Direct indices may be percentages or rates; these need not vary with the growth of population, because the influence of that trend is already eliminated, by having been put in both the numerator and denominator of the rate. If a rate index has a trend, that indicates some other influence, of organization or invention or so forth, which in turn has to be eliminated, when that is not what is being studied, so as to give a relative index of the rate.

If, then, a figure of the relative course of enterprise, obtained from a moving average of company formations, warrants its use as a primary index of the trade cycle, by showing a sufficiently definite fluctuation, then the primary indices for comparison are those of prices, employment, and enterprise. The fundamental influence is enterprise, the fundamental result is employment (as indicative of production), and the link between them is prices. The tracing of the cycle shows how this link supplies the dynamics of enterprise, through the

[1] The relation of moving averages to trend is discussed by Dr. E. C. Rhodes in *Elementary Statistical Methods*, p. 214 seq. The fluctuation of unemployment was regular in the sense that it had practically no trend; but irregular in the sense of an interval varying from 5 to 11 years, 7-year intervals being as numerous as all the others together. The average interval was nearly 8 years. It appears, from Dr. Rhodes' argument, that a moving average should not be based on too long a period. 'If we use too many items in our average we shall do well, as far as the irregular fluctuations are concerned, but we may distort the trend, and may not properly eliminate the regular fluctuations. If we use too few, we may not reduce sufficiently the irregular fluctuations, we may not get rid of the regular fluctuations, but we probably will not introduce distortion into the trend. In practice, we adopt a middle course, and take as the number of items in the average process that which will eliminate the regular fluctuations, hoping that thus we shall reduce very considerably the random fluctuations without introducing too much distortion into the trend. Thus in practice . . . we search for periodicity in our series.' These conclusions, with the facts stated, make seven years the right basis to take in the case of unemployment, and of indices to be related to it.

uneven rise of prices and costs, and the variation of the real cost of obtaining the amount due for monetary interest.[1] But the special feature of the cycle is at times of crisis and recovery. The significance of this is both theoretical and practical. If prices recover before enterprise, it may be best to assist prices in a depression; but if enterprise tends to recover first, it may be best to reinforce that tendency by the support of public enterprise. At periods of overdone activity, if enterprise withdraws first, the sort of remedy suggested is one which assists this prescience by a fuller control in the rationalization of the relations of producers to each other; if prices break first, the policy of bank rate may be more appropriate. Hence the importance of examining the priorities of the indices when these are shown up by the bending of the skein. Theoretically, it might be possible to argue that enterprise would follow prices, and employment would follow enterprise; or that prices would follow enterprise; or that the order would be different in booms from what it would be in depressions.

Something must now be said about each of the primary indices which are to be compared. First, as regards unemployment.

(*a*) Before the War, only one index of unemployment was available, the Trade Union sample percentage, which is to be taken in its 'corrected' form, whereby rough weighting is given between industries of larger and smaller fluctuation.[2] No such fundamental index is available for so long a period for any other country. It is from the average period of a fluctuation of this index that we get the number of years on which corre-

[1] I prefer this statement to that of the variation of the rate of nominal from that of real interest. The latter is usually obtained by adding the money rate of interest and the percentage change in prices. I am not sure that we can add the price of money and the value of money into a total which can properly be called a *rate* of either. The variation in prices would accrue to any one who had not lent his capital at all, but had hoarded it. There is some difficulty in regarding, as a part of interest, what would not be interest if it stood alone.

[2] For the figures see Beveridge, *Unemployment*, p. 456, and Table D. The correction has been modified at different dates.

sponding moving averages of the indices of prices and enterprise are to be based. The pre-War Trade Union percentage is strictly valid only as an index, not as a measure, of fluctuation; but from the short post-War comparison which can be made between the Trade Union index and that of the Insurance scheme, it appears that the former was also a fair measure of fluctuation. The average of the index is 4·4 per cent., and its straight-line trend from 1860 to 1913 is + 0·02. For the first half of the period, until 1887, the trend was more decisively upwards, and some discussion took place on technical unemployment, due to the progress of invention, which anticipated similar more recent discussions on technocracy; but seven-year averages after 1887 showed a fall, and from 1887 to 1913 the trend was level.[1] Of course, percentage changes in the ratio of unemployment are large compared with such changes in employment, and it is the latter which measure changes in industrial conditions rather than the former.

The index of unemployment has a 'good' fluctuation. Between successive high and low points it only once changes direction, and then only to a slight degree (1896–7). It is the clear fluctuation of this index which primarily shows the trade cycle, just as it is the sickness rate, not the health rate, which is used in medical argument. Common sense has to be used in the adoption of a scale on which to show it.

The important question here is whether, since there is only one index to use, we are sure enough of the turning-points of unemployment. In the case of prices, there are three indices to compare during the same period. But it seems that the proportional changes of the index at its turning-points are generally decisive enough. It is uncertain whether 1889 or 1890, and 1908 or 1909, is a turning-point, but it must be one or other of these in each case. Of the twenty-two ratios of change at the other eleven turning-points, only four are below

[1] The equation of this line is $y = 3{\cdot}86+0{\cdot}022x$, for the whole period. From 1860 to 1886 it is $y = 2{\cdot}68+0{\cdot}0126x$, and from 1887 to 1913 it is $y = 4{\cdot}55+0{\cdot}0002x$, approximately.

10 per cent.—taking a point in the second decimal place—and the lowest is 6½ per cent. Thus the change from 0·95 in 1872 to 1·15 in 1873 is a decisive change, though the figures are low. It is on this general 'acuity' of the curve that we have to rely in accepting its critical points.

The main difficulty is that the percentage does not include agriculture, and that it has to be used against figures of prices and enterprise which are strongly influenced by agricultural values. Agriculture in 1861 represented about 20 per cent. of the occupied population, and in 1911 only about 8 per cent. Its ratio to the group of industries covered by the Trade Union percentage declined from about one-seventh to about one-eleventh over that period. It is reported to have a very low rate of unemployment, and a very small fluctuation. This is due, in part, to the low elasticity of the demand for food products; in part to the influence of natural causes on the pace of agricultural production. The industry has a very limited power to shut down, or work short time, or speed up, since live-stock make regular demands on maintenance. For this reason, the trade cycle in agriculture is one of profits more than of production or employment. It is sometimes suggested, however, that unemployed agriculturists migrate to cities and towns, and come to be counted among the unemployed of low-grade occupations. If that were the case, the general rate of unemployment would be put too high, because of the omission from the ratio of the figures of the agricultural population. This would bias the ratio at the dates when agriculture counted for a large part of national employment. But it is not mainly in this way that the influence acts. Because of the actual decline of that industry in this country, fewer persons have been able to enter it at all; so that the migration from the rural districts has not been mainly a migration of unemployed from one occupation to others. It is not a part of agricultural unemployment; this is shown by the early ages at which the migration takes place, between 15 and 25.[1] Only to a small

[1] The nature of this migration was shown for London by the bulge in the

extent are the real unemployed of agriculture counted anywhere else. The exclusion of agriculture from the figures affects them for the most part simply by the comparatively small proportion of agriculturists who can be stood off to wait for better times. The figures are believed to be in the region of 1 or 2 per cent. An industry which employs, in its most laborious departments, about seven men to 100 acres, and about three to 100 acres elsewhere, cannot easily reduce such staffs and maintain its equipment. Now the exclusion of a low-rate industry of declining national importance means that, if it had been included, the trend of the general rate of unemployment would have been more positively upward than it was; and also that the fluctuation would have been less in its range.

It is, however, plain that the acuity of the curve of unemployment is great enough to maintain its turning-points where they are, against any new influence from an industry with a relative weight of (say) one to nine, and a rate of unemployment which would be high at half the average of other industries. In other words, the change in agricultural unemployment required to alter a turning-point on the unemployment curve would be such as to give agriculture an impossible rate of unemployment. This can be verified for the only years which matter, the years 1893–4, when the Trade Union index changed by only 6·5 per cent. Unemployment changed from 7·7 to 7·2 per cent. If agriculture, with a relative weight of one to nine, had as much as 4 per cent. in 1893, it must have had over 8 per cent. in 1894, in order to move the turning-point of the curve.

For these reasons, it appears to be justifiable to accept the

curve of its relative population between these ages. (See Booth's *Life and Labour*, 'Poverty Series', vol. iii, p. 70.) From figures supplied to the Agricultural Tribunal of Investigation, 1922–4, it appears that this was not true of all large cities; on the population figures of 1911, it obtained for London, Glasgow, Manchester, and Birmingham, but not for Bristol, Leeds, Newcastle, Cardiff, or Sheffield. From the *Report on Rural Migration* of 1913 it appears that the set of migration was mainly to the Colonies, then to the mines and the cities.

critical years of unemployment as correctly given by the Trade Union percentage, and to compare them with the critical years of general enterprise and prices.

(*b*) It requires argument also to justify the index of enterprise which is here employed. That is based on the annual formations of *new* limited joint-stock companies, of which an index can be constructed since 1860. This source of information does not appear to have been used hitherto. Since 1884, it is possible to trace the annual increase in the number of companies on the register, or of their capital, and this was done by Aftalion. But that figure is at best a net result, showing the excess of formations over liquidations and dissolutions, and there are technical administrative reasons why, in this country, a net result of this kind is unsatisfactory; especially the reason that the number of defunct companies removed in any particular year by dissolution (under the Act of 1880) is accidental. It will be found, too, on examination, that the annual increase in the register is often far from equal to the difference between new formations and the sum of liquidations and dissolutions.[1] It will be shown later that in England liquidations do not have a very close relation to the fluctuation of the trade cycle, so that new enterprise must be taken gross and not net, in order to show whether it has such a relation.

The annual formations of new companies, as distinct from new registrations of old ones, are, of course, not identical with new businesses. Existing businesses may be converted into the company form. There are known to be cases where that conversion is made, for less desirable reasons than expansion of enterprise, by firms in an insolvent condition. But it is assumed that in general the assumption of the company form means an expansion of enterprise. It has been shown by

[1] In view of the use made of these figures by some writers, the following example may be given. Between 1900 and 1905 the addition to the Register was 9,158 companies. The additional formations were 18,226, and the sum of liquidations and dissolutions was 14,135, a difference of 4,091, or less than half the addition to the register. The explanation is in necessary vagaries of administration, which affect totals, though some ratios may still be taken, *e.g.* the ratio of liquidations.

Dr. Clapham that in important industries in this country joint stock was a slow development after the Companies' Acts were passed, so that the private firm kept for a long time a representative position. The only figure to hand of the extent to which new companies were new businesses is one given by the Registrar to the Royal Commission on Trade Depression in 1886. Of the 7,000 companies formed in the years 1880 to 1884, 560 were conversions of private firms.[1] Companies 'of a private character' were about one-third of all companies registered in the first six months of 1890, but this does not mean that they were all or mainly conversions out of private firms. Examination of the list given to the Committee of 1895 shows that two-thirds of these 'private' companies had anonymous titles, and one-third were registered with personal names.[2] The conversion of public companies to the form of 'private' ones in the legal sense of the Act of 1907 is a different movement, which proceeded rapidly, but is not relevant here.

In this connexion, it appeared worth while to obtain some other indication of the way in which partnership was affected by the Companies' Acts. This could only be derived from the numbers of partnerships *dissolved* each year, these numbers being taken as indicative of the extent of the whole field of partnership. A sample was therefore taken from the *Gazette* by counting the dissolutions in the first issue after the middle of each month and multiplying by eight, as the *Gazette* appears twice a week.[3] For decennial periods the average annual figures are as follows:

| | | |
|---|---|---|
| 1862–71 | 2,520 | 100 |
| 1872–81 | 2,720 | 108 |
| 1882–91 | 2,380 | 94 |
| 1892–1901 | 2,260 | 90 |
| 1902–11 | 2,050 | 81 |

But this rate of decline of partnership applies to the whole field of industry and the professions. It must be supposed

[1] C. 4621. [2] Cd. 7779, pp. 56–63.
[3] This research was carried out by Mr. G. F. Todd, of Balliol College.

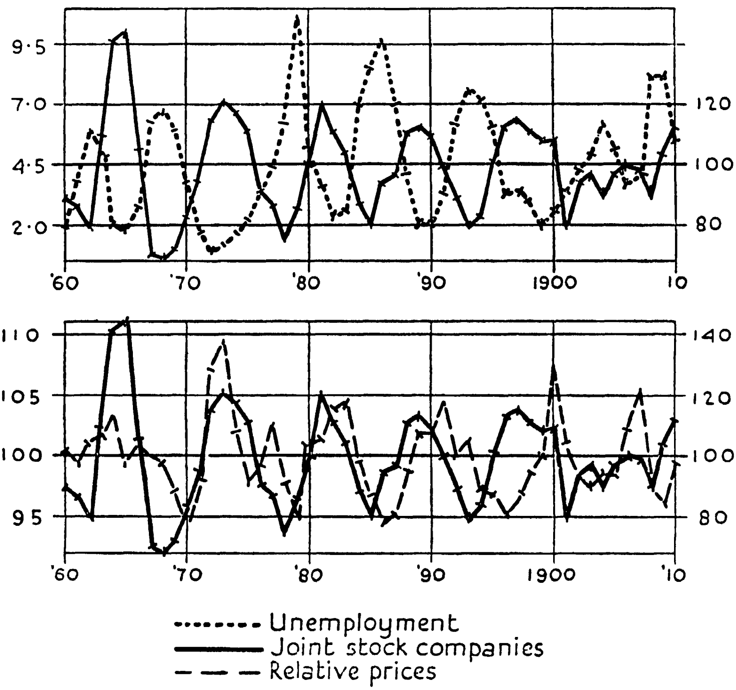
that in the professions partnership has increased with general progress, since solicitors and doctors do not form companies. The industrial decline of partnership has been more rapid than these figures show. If one-tenth of partnerships in the 'sixties were professional, and these had increased in proportion to population, the decline in industrial partnership would have been about one-third; if one-fifth were then professional, the industrial decline would be about a half. Income-tax assessments show that, at the end of the nineteenth century, firms were still numerically important in industry. It is sufficient for the present purpose if company formation is a true sample of the course of enterprise.

When the formations of new companies are indexed against their seven-year moving average, the fluctuation which results is very clear and decisive, as the graph shows; the figures are appended. Up to 1899 there is a practically unbroken continuity in the upward and downward variation, and an obvious periodicity of development. As has been said, this is justification after the event for regarding the company index as an index of enterprise. The difference between it and those curves which are not fluctuations, as shown above, is evident. There are two periods of exceptional change in the condition of enterprise. One is in the early 'sixties, due to the rapid spread of companies under the new laws, and to a great slump after the crisis of 1866; the other is in 1901, due in part to the Boer War, in part to the more strict conditions of the Company Act of 1900. The decline in new formations had begun earlier, and may be connected with the exceptional increase of reconstructions and amalgamations, the number of which, if judged by the companies which liquidated for the purpose, was at a maximum in the years immediately after 1895.[1] But the new Act causes the curve to 'fault', and its smoothing for that reason would make the decline regular until 1902. The magnitude of the decline in 1866–7, compared with the index of unemployment, which did not reach a corresponding figure,

[1] See Appendix, Table G.

especially when compared with 1879, suggests that that fall of enterprise was largely financial.

It will be seen that, as was to be expected, the curve of enterprise tends to change direction before that of unemployment, and is only once lagged upon it in the whole period As regards prices, the result is more important.




(c) The price indices used here are those of general prices. It may seem that the prices of materials would be a more proper comparison with an index of enterprise based on company formations, since companies are not formed in agriculture. But an examination of the companies formed in any year shows that the enterprise they include is more varied than corresponds to materials alone; in 1880, for example, nearly a fifth of them represented retail and other local services,

and even the industrials were a very diverse group. Nothing can be assumed as to where the changes in enterprise start, and the most comprehensive price index appears to be the appropriate one.

In the appended Tables are shown the relative prices of Sauerbeck and the Board of Trade, the latter on the basis of 1900. For the purpose of my argument, it is the decision of the turning-points of prices which matters; as between these two series, there is complete agreement on that question. The moving index of the *Economist*, however, differs frequently from the others, and if it were as well based, this disturbance would be serious to the argument. They might all be averaged, and the result would then be similar to the trend of the majority. But it appears to me that an index based on two dates of the year is not a real corrective of indices of average prices; and therefore I have now depended on the other two.[1] In inquiries concerned with measurement of fluctuations, the mean of these price relatives might be taken; but in relation to the turning-points of the cycle, the only time as to which there is any doubt is in the early 'eighties. The Board of Trade decides in favour of 1883, against the equal figures of Sauerbeck for 1882 and 1883. The taking of relative price indices has otherwise only confirmed what is suggested by direct inspection of the graph of the absolute indices. There is practically no doubt what are the critical points of the price series, or of the reality of a cycle of prices over this period. The main disturbance was the rise of prices in 1877 due to exceptional harvest causes.

When the three indices which have been taken as fundamental are compared with each other, the following sequence appears at the times of change in the cycle (see Table opposite).

This comparison is valid only for that period of years, which is rather particularly the trade-cycle period. It will be seen that it is enterprise which has had the priority at times of

[1] If the *Economist* were included, there would be a peak of prices in 1882, instead of in 1883, and my results would be somewhat improved.

| High | | | Low | | |
|---|---|---|---|---|---|
| *Enterprise* | *Employment* | *Prices* | *Enterprise* | *Employment* | *Prices* |
| 1865 | 1865 | 1864 | 1868 | 1868 | 1870 |
| 73 | 72 | 73 | 78 | 79 | 79 |
| 81 | 82 | 83 | 85 | 86 | 86 |
| 89 | 90 | 91 | 93 | 93 | 96 |
| 97 | 99 | 1900 | 1901 | 04 | 03 |
| 1906 | 06 | 07 | 08 | 09 | 09 |

change in the cycle.[1] This result fails once on these figures, and it would fail in 1862, when the condition of prices is out of relation to the other indices. But after the Company Act has settled down, and the figures of new company enterprise are large enough to handle, the sequence of break and recovery is uniform. The conditions of the period 1895–1901 have been commented on, and allowance for them would reduce the lag of prices on enterprise. I have, however, preferred not to modify the figures. This sequence is favourable to the interpretation of self-generation, and tends to dispense with the necessity of what Professor Fisher calls the 'starters' of a process which is then self-developing. For, it may be repeated, there is little difficulty in the tracing of the cycle once it is started; the knot that has to be cut is that of its reversal, especially at low indices.

A distinction has to be made between this sequence of indices and an account of the influences which *cause* the reversal of the cycle. The relatives of prices and enterprise are of the nature of static indices of magnitude, and only express that fact of magnitude against a trend which has to do with other things. The sequences do not mean that the enterpriser was able to take into account a seven-year course of prices, three of which were ahead of him. In the order of these indices we have the cycle 'cold', as it appears to an investigator after the fact. If we want to study the same thing

[1] This priority is supported, as regards high points, by Marshall's statement that 'most formations of new companies, and reorganizations of old companies, are made in the years just before an inflation of credit and prices reaches its bursting point' (*Industry and Trade*, p. 334).

'hot', we have to look for some index of prices which will as nearly as possible coincide with the index of enterprise; this will be the index of those prices which the enterpriser takes into account, and under whose influences he changes the course of enterprise before relative prices change. If such an index is found, it will take out some or all of the lag in the above Table—a lag which is not a defect, but the expression of an important priority. What kind of price index would reflect the influence on the enterpriser? Many may be tried. The assumption which has given the best result is that in any year enterprise is related to actual prices in a manner which would involve (*a*) expectation of next year's prices, which will have some continuity with this year's, (*b*) the average actual prices of the two preceding years, (*c*) the rise or fall of prices in the two preceding years. This is one year forward and two years back, a reasonable outlook for enterprise. Then an index of trade *stimulus* would be given by the net sum or average of these ratios of the actual (not relative) prices of four years, expressed preferably for this purpose in the form of differences, such as:

$$\frac{p_4-p_3}{p_3}, \quad \frac{p_3-\frac{1}{2}(p_1+p_2)}{\frac{1}{2}(p_1+p_2)}, \quad \frac{p_2-p_1}{p_1}.$$

The excess over 100 of the net sum of these ratios, as percentages, would be a not unreasonable index of the expectable influence on the enterpriser of the actual conditions of prices in the year taken as 3.[1] It may be supposed that the stimulus will be greater if past prices have been rising, while the second ratio only involves their average. This measure gives a fairly good correspondence, over a long period, with the index of enterprise; but it has failures, and the Table is given as at any rate an example of this method of eliminating the lag. The existence of the lag, or priority of relative enterprise over relative prices, remains significant; taking it out is significant

[1] Table F, *e.g.*, in 1900 the net (Sauerbeck) sum is +13%.

for another purpose, that of causation. Other formulas for prices may do this better.

| High | | Low | |
|---|---|---|---|
| *Enterprise* | *Prices* | *Enterprise* | *Prices* |
| 1865 | ? | 1862 | ? |
| 73 | 72 | 68 | 1868 |
| 81 | 81 | 78 | 78 or 75 |
| 89 | 89 | 85 | 85 |
| 97 | 99 | 93 | 93 |
| 1906 | 1906 | 1901 | 1902 |
| | | 08 | 09 |

The sequence of the indices is commonly supposed to be more important at low than at high points in the trade cycle. It is usual to regard the problem of the cycle as particularly one of the explanations of recovery. In a sense this is a paradox, since people want to get away from bad trade, and will only be forced out of conditions of good trade. Still, the paradox is actual, and the cycle becomes a tracing of automatic sequences once it is well started out of depression, until it reaches another depression. What my argument appears to show is that enterprisers have got themselves out of depression, rather than that they have been led out of them by actual price policies. To that extent, there is a self-development which is favourable to the psychological theories; but we cannot put optimism in the air, and I think that it requires the link between the hot and cold ways of treating price indices. But it appears to me that some conclusions follow of practical policy, especially when a depression is very severe. For, if my argument is right, what we ought to do is to encourage enterprise in its own desire for recovery. It is not induced price changes which have done this in the experimental period here reviewed. These have followed enterprise. Now there are three methods of encouragement of enterprise. In order of seriousness, from the public point of view, they are —public works, remission of taxation, and inflation of the currency. This is on the assumption that the credit system is

not effective by itself for recovery. The first of these methods is in the strange position of being argued out of existence by very detailed analysis, and restored to vigour by broad statements of common sense; in each case by distinguished economists. Such works are an established type of enterprise, not peculiar to periods of depression, either in their nature or in the fact that they are *always* liquidated by compulsory payments widely spread over rates and taxes; and it appears to be a strange administrative idea that they are not capable of adjustment to the conditions of private enterprise. Besides, we have to compare them with the other public methods which can be adopted, and which may offend established ideas of safe finance. That they would encourage the private enterpriser, by example and market activity, in doing what he is trying to do, and has apparently taken the initiative in doing in the trade-cycle era, appears to me true. He may, in the second instance, be encouraged by remission of taxation, through the suspension of Sinking Funds, up to the point of budgeting for a deficit; but this is getting on to thinner ice. As to pure inflation, every one who has been a sapper knows the rule—'you must never have used your last resource'. Hence the interposition of reflation, or inflation with the best intentions. I do not say more than that the first resource should be well used, and that its place in recovery is confirmed by what this study shows of the private enterprisers' own prescience and readiness to work with signs of revival.

## II

To turn to the negative aspect of enterprise, the relation of insolvency to the course of the trade cycle.

The most precise evidence on this subject is that given by Mr. Snyder (*Business Cycles*, ch. x). His investigation is based on Dun's *Record of Insolvencies* in the United States, which gives since 1866 a ratio of business failures to the number of businesses operating. These figures are collected by Dun's own agency, and are officially quoted in the American Statis-

tical Abstract. When the annual ratios are compared with Mr. Snyder's own Index of Bank Clearings, an extremely close inverse relation is shown between insolvency and business activity. In that country, therefore, insolvency is an inverse index of the trade cycle. It appears that the insolvencies there include both those of companies and of private firms. The two indices cross the base line at the same time, and their maximum and minimum points correspond. This would verify for that country the *a priori* expectation as to the relation of such indices, if his method of constructing the Clearings Index is correct.

On the other hand, Aftalion finds the results of his examination to be very inconclusive. In France, before 1882, the rhythm appears to be the opposite of what would be expected, and after that date the regularity is much disturbed. He concludes that in that country 'the activity of the period of prosperity leads to the foundation of many hazardous enterprises, which founder in their prosperity after a short life, while the industrial depression has the opposite effect. So that the rhythm of failures is rather a symptom of variations in activity than in prosperity.'[1] In Germany and the United States he found that the figures were complicated. And he abandons any attempt to find a general relation between insolvency and the trade cycle. So also, in de Foville's *Barometer*, insolvency is the item in which the order of the rhythm is most plainly upset.[2]

There are numerous references to this question in the Annual Reports of the Registrar of Bankruptcy in this country.

'The assumption that depression in trade is necessarily associated with failures in business . . . does not appear to be well founded. Failures may be due to many causes, but the chief cause is not a decrease in the volume of business so much as a want of caution in its conduct. And a want of caution is clearly exhibited when traders give a large amount of credit recklessly, or when they

[1] *Crises périodiques*, Bk. II, ch. viii.
[2] *v.* Wagemann, *Economic Rhythm*, p. 126.

knowingly carry on their business at a loss. . . . But recklessness in giving credit may and generally does prevail during periods marked by a large expansion of business rather than by its contraction.'[1]

The retail trade, he thinks, is specially liable to be oversupplied with credit, and to continue 'insolvent trading' and 'weak selling' to the detriment of prices; but he does not except other businesses or companies from the same criticism. The Annual Reports return continually to this subject. The result would evidently be to confuse any relation between insolvency and the trade cycle, since the actual date at which insolvency was declared might be far removed from that at which it had really occurred. The exclusion of the retail trade would, on his argument, shut off some of this confusion, and stricter results might be looked for if only joint-stock companies were inquired into. A large proportion of bankruptcies are those of retailers, and even now insolvent trading has a large share in the figures.

The presupposition itself, of an inverse relation between insolvency and business prosperity, is not in any case the only one which is valid. It is one line of argument that falling prices and insolvency react on each other, so as slowly to accentuate depression, until the decks are cleared again. In conditions of trade fluctuation especially, the profits of good times may be dispersed unduly, or fixed obligations may be incurred which are an embarrassment when prices turn, or new enterprises may not then have got past the point of organization, and so may have a bad start. But it is also possible to follow the idea that good trade comes to be favourable to enterprises of less than average efficiency, and that insolvency may be of the nature of an autonomous influence, through this channel of comparative inefficiency, if such businesses are

[1] Report for 1884; repeated in subsequent years. Cf. Marshall, *Money, Credit, and Commerce*, p. 245: 'Reckoning must be made with the probability that some credits will be granted, not wisely but too well, . . . to business ventures that are somewhat lacking in administrative capacity, or in foresight.'

less adaptable to further increases of costs. Therefore, much insolvency would occur while trade was still good, and its influence would spread. As a corollary, there is the supposition of a 'detonating' influence of insolvency about the time of highest prices,[1] as a precipitator of depression, and of its 'reviving' influence toward the bottom of a depression.

It is clear also that the nature of insolvency legislation may cause these influences to act differently in different countries.

My purpose is to supply the evidence for this country, as this chapter appears so far to be unwritten. This is largely due to the deficiency of our statistics. The new Bankruptcy Act of 1883 made a great breach in the continuity of our records, and even after that date it is difficult to allow for the vaguer figures of Deeds of Arrangement and Compositions with creditors. A Deed of Arrangement under the Act of 1887 may become a bankruptcy later; and the passage of this Act affects the figures of actual bankruptcy, by the new status then given to this alternative. I have preferred to use mainly the figures for companies, which have much greater legal continuity since 1862.

Official returns of company liquidations exist only since 1891. Under the law, all liquidations have to be reported in the *Gazette*, and I have compiled from that source the figures since 1865. This Table is more complete than that which I gave in an earlier study of this question.[2] The figures are now for the calendar year, whereas they were then given for the judicial year (Nov.–Oct.) in order to square with the windings-up in Chancery. But these windings-up in Court have become a rapidly declining proportion of all liquidations. The appended Table G enables the liquidations to be compared with other annual indices in a more accurate way. A liquidation is referred to the year in which the final resolution to liquidate was passed, not to the year in which it was gazetted. The end

[1] Marshall: *Money, Credit, and Commerce*, p. 251.
[2] *Economic Journal*, Dec. 1929.

of the whole matter, the discharge of the liquidator, may not occur for as much as twenty or thirty years after liquidation was entered on, and the company ceased to function.

The official figures do not classify company liquidations, but such classification is necessary in order to secure any reliable index. In this country some liquidations, called 'compulsory', take place by Order of the Court, and these include, according to the Registrar, the most sensational cases of mismanagement, fraud, and manipulation. They are certainly insolvencies. Next to these come those voluntary liquidations which take place 'because the company cannot, on account of its liabilities, continue in business'. This is also definite insolvency. The view that 'liability' liquidations should alone be taken as an index is, however, too narrow, because many of them are separated very thinly from compulsory liquidations, being entered on to keep the company's affairs out of Court. Strict insolvency might be taken as the sum of these two forms of liquidation, and this would greatly limit the basis of the figures, and make their variations in early years unreliable. The largest group, the voluntary liquidations, when the company had not yet been overtaken by its liabilities, ought to be allowed for, since here again the line may often be a thin one between them and 'liability' cases. A general index of insolvency has to take some proportion of them; they stabilize the variations, although it will be seen that the general index moves similarly with that of strict insolvency.

As an indication of what is included in 'non-liability' voluntary liquidations, the following examples may be quoted. Companies were wound up,

'for the purpose of dividing the profits among the shareholders; because the ship K. has been sold, and is the only ship owned by the company; because of the death of both the practical men connected with the company; because of the involved condition of the company's business; because the Directors have received an offer of £$x$ for the whole business; in view of dwindling business, and the constant calls for money which the Directors have had to find personally, no other support being given by the

Shareholders; because the company has ceased to do business, and has no other source of income; because there is no further business for the company to undertake; because their Directors, owing to other engagements, are not able to give the necessary attention to the business of the company; because the Local Authority has removed the pier, the pier company is wound up.'

I came to the conclusion, on two grounds, that a third of non-liability voluntary liquidations should be excluded. First, by the method of the general impression obtained from going through the records of all these years, and finding further details in a number of doubtful cases; second, by using the special Return on the company liquidations of 1896,[1] and comparing it with the *Gazette* figures. That Return classified liquidations according to whether a loss was incurred or not; and, by cross classification, assuming that Chancery and 'liability' liquidations did involve losses, it seemed that about two-thirds of the remainder of the *Gazette* figures did so. This Return, of course, refers to only one year, and has been used to confirm an impression, not solely on its own authority. Therefore, the general index of insolvency is given by $(A+B+\frac{2}{3}E)$ and tabulated in column F of Table G. It is obviously necessary to exclude amalgamative and reconstructive liquidations.

As in the case of formations, the number of liquidations, and not the liabilities, is the basis of the index, as indicating the spread of the influence of the conjuncture. It represents a very varied total of kinds of companies. I have indicated elsewhere[2] what the company formations of a given year included in respect of this variety, and the large spread must be kept in mind.

In columns G and H of Table G are given respectively the percentage indices, against a seven-year moving average, of the broader and narrower totals of insolvency, and these are the figures which may be compared with other indices of trade fluctuation. The movements of these relative indices are so

[1] No. 328 of 1899. [2] p. 101.

similar that one might assume that, for post-war continuation, some percentage of total official liquidations might save the immense labour of further research into classification. But I have not felt able to assume this, in view of the special measures which were taken after the War to prevent liquidations in important industries or districts.

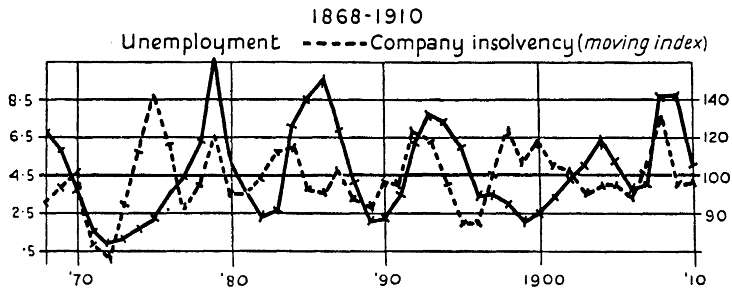
Besides the indices based on the moving average, there are available for a shorter period indices of insolvency given by the *ratio* of liquidations to the number of companies on the register, when this number, recorded at the end of April, is corrected for mid-year. This series begins in 1884, the first year in which the register is known. It is given in Table H, both for the strict $(A+B)$ insolvencies, and for the broader total $(A+B+\frac{2}{3}E)$. These ratios have a strong trend downward, and they are converted into moving indices. For the period available, 1887–1910, these ratio indices follow very closely the indices based on the moving indices of the totals of liquidations; the fit of the curves is extremely close, especially in the case of the strict insolvencies.[1] This helps to confirm the reliability of the more long-period index for the years in which it is alone available.

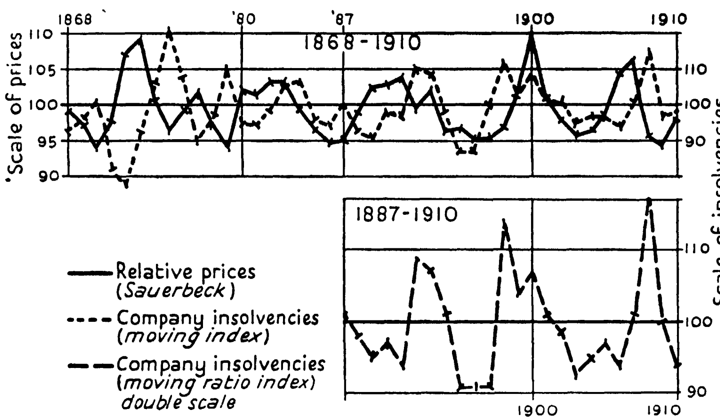
There is also available since 1892 a figure giving the ratio of the paid-up capital *involved in* all liquidations to that of all companies operating in each year. It is plain that this is not a reliable index of variation in insolvency, though the similarity of its trend with that of the other ratio indices is of importance in connexion with argument on the course of trade risk.

Taking the general index, it is plain from the charts that it does not give a continuously 'good' fluctuation. It may be contrasted in this respect with the index of new enterprise, or that of unemployment. It is a relative index against a seven-year moving average, which ought to bring out any fluctuation. Its main defect is in the period before 1884; after that date a fluctuation, such as satisfies a proper interpretation of

[1] As shown in the Graph.

that word in trade-cycle argument, is more apparent. After 1892, the fluctuation is more definite. The basis in the original figure is always becoming stronger; insolvency was tending to have a fluctuation which would relate it to the trade cycle.




If the index is smoothed for three-year periods, its fluctuation since 1883 is good.

What is the relation of this index to those of prices and unemployment? It will be seen that it corresponds to unemployment in such critical years as 1872, 1879, 1889, 1906, and 1908, and is close to it in 1893. But it has also great divergencies. Now there may be a factor of that kind, such that it is brought into conformity with another at extreme points, though it does not have a good relation to that other generally. The interpretation has to consider the whole of the curves,

and I have adopted the practical test of the loop relationships. When the two indices are on the same side of the line, their signs are the same, and the product of the signs in that year is positive. The proportion of positive signs to the number of years is a prima-facie test of the relation. By this test, insolvency is related *negatively* to unemployment, the ratio of positive signs being 0·4. This is true for the whole period, and also since 1886. If smoothed indices (for three years) are taken, the relation is neutral at 0·5 for the whole period, or since 1886.

In relation to prices, insolvency is positive over the period as a whole, but only to the extent of 0·54; since 1886 it is 0·64. If the indices are smoothed, for three years, the positivity over the whole period is 0·65, and since 1886 it is 0·7. The relation to prices is at first negative, but as the figures become larger a fairly strong correspondence takes place.

The result is such as, in this country, to justify the tentative conclusion of Aftalion that active trade was tending to include an unsettling factor in the creation of insolvency, and that this was among the factors of reversal. The Registrar of Bankruptcy attributes this to a too facile use of credit, though this may not apply so well to the case of companies. It might be held that the real unsettling factor lies in a moderate subsidy to inefficient management when money-making is easy. If so, this would be almost an autonomous cause of trade fluctuation. I do not think, however, that the facts allow of more than bare suggestion of this possibility. They rather contribute a caution against the theoretical presumptions which might be made concerning the incidence of insolvency, in this country, on the trade cycle.

# IV

# RISK OF ENTERPRISE

[The question of business risk has been made fundamental to plans for industrial reorganization. Competition is coming to be normally accompanied by such adjectives as excessive, cut-throat, chaotic, or unregulated, and to be rarely spoken of simply. On the other hand, it has been authoritatively held that the risks of trade were declining, and that in some countries the cost of risk was not serious. The question is discussed by using some researches into the lifetime of businesses, and also some indices of insolvency. So far as these results go, they do not support the usual epithets applied to competition. This is no bar to planning or rationalizing policy, but that policy should depend on future gains rather than on past causes. There are various kinds of economic order, of which a planned order, in the sense in which that word is now used, is one.]

AN inquiry into the amount of business risk is related to such economic questions as the following. First, to what extent did the competitive, pre-rationalization era mean that the conditions of industry deserved to be described, as they have been, as a chaos, or a welter, of independent producers, imposing such risks and losses as to condemn that era as unreasonable in its business structure; and, as a special feature of this, did the conditions become worse as time went on, companies gradually taking the place of firms and partnerships? Second, is the evolution of combinations in industry, leading to the rationalization ideas of recent times, to be explained mainly by excessive risks in the competitive system, against which defence was sought by combination, or is it to be explained simply by administrative foresight, as another stage in organization? For it is obvious that the latter is an economically more convincing idea than the former; the degree of combination brought about under the motive of escape from the risks of competitive conditions might not be the optimum from the point of view of future conditions of survival and working, but merely a makeshift; while, if it came about on its merits as a system of production, it presents a better face to economic inquiry. Survival, and adaptation to market

conditions, do not depend on past motives but on future economy.

Third, the classic modern account of how new capital is influenced in its direction into industry is related to what are called 'representative' conditions in existing investment. With an increasing volume of business in an industry there is, up to a point, an increase in the scale of the individual enterprise; and those enterprises whose scale is in proper relation to the volume of the trade, and are, therefore, able fully to use the advantages which a large volume induces, are representative of that industry at that time. Their costs and prices are those at which new enterprise looks, for of course there is room for more of such businesses as the market grows. For a time new enterprise may have to work, against the prices possible for representative concerns, at higher costs, till the period of organization is complete, and a measure of goodwill is obtained. Marshall speaks sometimes as if such representative businesses were not any sort of average, but existed and could be indicated.[1] They must have had 'a fairly long life, and fair success'. New enterprise looks to the chance of reaching a similar status. Now the risk of insolvency on the way is not, and cannot be, calculated in an actuarial way by new enterprisers. They have to take that chance and, as Adam Smith pointed out, enterprise is overweening in the confidence with which it backs itself to do as well as the representative businesses that are established. The enterpriser does not think that he is one of a number all subject to the same chance of loss. But representative businesses have come through risks of failure, and one question is the factual one: what have been the failures on the way to 'long life, and fair success'? This matters in the national account, and for an actuarial view of the economic rate of profit which would make up for the losses. It is an indicator of the risks of the system. What then was, in the trade-cycle and pre-rationalization era, a fairly long life for a company? This question of *survival* is

[1] *Principles*, p. 318.

one approach to the measure or the appreciation of risk and loss.

Until quite recently, no attempt had been made to give theoretical reasoning on these questions any basis of fact. Marshall said[1] that 'the risks of trade are on the whole diminishing rather than increasing', and this statement appears unchanged between his editions of 1890 and 1922, with the proviso 'as we shall presently see'. But I have not found in his work the explication of this proviso. It is an important question from all the three points of view mentioned above. On the other hand, Giffen held that 'it would be unsafe probably to draw any certain conclusion that bankruptcy and insolvency are declining'.[2]

There are two ways in which this question can be approached. First, we may seek to ascertain what is the magnitude of the figures which show the lifetime of the businesses formed in particular years; what were their vital statistics; how many of them lasted for five or ten years. In this respect we have had to work for long enough with a statement made by Leroy-Beaulieu, the reference of which has been extended by subsequent quotation. He said that:

'Un dixième des commerçants et des industriels finissent par la faillite; mais bien d'autres, en plus grand nombre, arrivent à la déconfiture, et un nombre plus considérable encore ne fait que vivre tant bien que mal du produit de la fabrication ou de la vente sans arriver à la fortune. On admet, en général, que, sur 100 commerçants ou industriels, 20 disparaissent presque aussitôt, dès la première ou la seconde année, renonçant à des occupations qui leur apportent des déceptions promptes; 50 ou 60 végètent, c'est-à-dire restent à peu près dans la position où ils étaient, et 10 ou 15 au plus ont un plein succès.'[3]

This estimate is quoted by Marshall,[4] from 1890 to 1922, and copied into other accounts, as the only statement going on the subject. But its author had expressly limited it. 'Il ne faudrait pas cependant admettre ces calculs pour les

[1] *Principles*, p. 621; 1st edition, p. 658.
[2] *Statistics*, p. 380.
[3] *Répartition des Richesses*, p. 304.
[4] *Principles*, p. 622.

branches supérieures du commerce et de l'industrie; ils sont vrais surtout des débitants; on trouve ailleurs plus de stabilité.' The *débitants* are apparently, from the context, small dealers and retailers.

As it is desirable to check or verify a current report of this kind, I decided to make the test of finding out what had actually happened to the joint-stock companies formed in a particular year. This laborious inquiry was carried out for the year 1880, the facilities being provided by the Registrar. Since the first publication of my results,[1] an earlier period has been similarly investigated by Mr. Shannon. Much more work remains to be done on these records, but at any rate there are now some definite results where there were none.

Second, we may seek to ascertain what was the *tendency* of business risk during the trade-cycle era. Here we must use the figures of insolvency. In the United States a figure of insolvency has been available since the 'sixties in Dun's statistics. These are accepted and officially quoted in the statistics of that country. A ratio is available of annual insolvencies to the number of existing businesses of all kinds. The tendency of that ratio can be observed over the period from which the risk argument has been mainly derived; the variation of this ratio being assumed to indicate similar direction of variation in risk as financial result.

In this country no record of the number of company insolvencies is officially available before 1891; but it is now supplied from the *Gazette*, where liquidations must be recorded. We cannot, however, obtain any *ratio* of insolvency prior to 1884, the first year in which we knew the number of companies on the Register. The ratio which is available since then can be quoted for either the more strict company insolvencies *which occurred because the firms were definitely unable to* meet their liabilities; or for a larger number of insolvencies, which includes a proportion of other voluntary liquidations, as explained in a previous Essay. There is also available since

[1] *Economic Journal*, December 1929.

1892 a ratio of the amount of paid-up capital *involved in* all liquidations to the paid-up capital of all registered businesses, but this is plainly less satisfactory.[1]

## II

First, then, how much can we get to know about the survival of business as an index of risk in the great competitive era? *A priori*, we might just as well expect 20 per cent. of them to survive ten years as 40 per cent. What kind of figure is in fact given?

There exists a Return[2] made in 1864 of all companies formed under the Joint Stock Acts from their commencement, and showing for a period of about seven years the figures of survival and liquidation. When the tables for England are summarized, it appears that 84 per cent. survived the first year, 73 per cent. the second, 70 per cent. the third, 63 per cent. the fourth, while about 46 per cent. survived the seventh year. There also exists a Return made by the Registrar to the Select Committee of 1867, giving even higher figures of survival; for example, 80 per cent. of the companies registered in 1862 are shown as still operating in March 1867.

These Returns cover too short a period, but they are vitiated by another fact. There is a form of enterprise which is from the outset of our records described as 'abortive'. Companies are registered which never get to work at all. Before the year 1880, a company could only go off the register by formal liquidation. Abortive companies did not take this trouble; they remained on the register, and failed to make the annual returns required by the law. There are penalties for such default, but the Registrar could not proceed to exact them *unless the common informer took the initiative. By the Act* of 1880, the Registrar was given power, after inquiry, to dissolve such companies. Till then they inflate the statistics, and *it* is no small *inflation.* For example, *in the year 1877,* when the total number of companies was about 7,000, there

[1] See Appendices. [2] No. 452.

were 2,750 on the register which had made no returns for seven years, and many more which had defaulted for three, four, or five years. In the same year the nominal capital of abortive companies was given to the Committee of that year as 539 millions, against 705 millions in going companies. Attention to the Act of 1880 is necessary to avoid pitfalls in the interpretation of our company statistics.

The figures of the Return of 1864 have been examined by Mr. Shannon,[1] with the result that, excluding the abortive companies, we have a table of vital statistics of businesses at the beginning of the Joint-Stock era. Besides abortive enterprises, it is necessary to exclude those wound up for the sake of amalgamation or reconstruction, since their lifetime is obviously doubtful. His results then apply to over 2,000 companies, formed over the period 1856–63. The results are compared below with my inquiry into the new companies formed in 1880.

In that year there were formed 1,199 joint-stock companies of which 47 were 'old' companies, but registered for the first time. The question, how far a new company is a new business is referred to earlier in these Essays. There were only eight reconstructions and, in handling the files of the 1,152 new registrations, I feel confident that they represent, with a small enough margin of error, new enterprises having an economic life beginning in that year. They include the group of companies formed in the Stannaries.[2]

The year 1880 was one of sharp recovery of prices, which were relatively high till 1883; comparison is here to be made with Mr. Shannon's results, which on the whole had more even conditions at the outset, relative prices having only one bad year between 1856 and 1868. The companies of 1880 had a good start, and then fell on bad times. This affects the comparison of the results, especially in earlier years of company life.

[1] *Economic Journal, History*, vol. ii, No. 7.

[2] For this reason they differ slightly from those given in the *Economic Journal*, Dec. 1929.

The new companies formed in 1880 are a group which consists of industrials (including mining, trade, shipping), to the extent of about 64 per cent. Slightly less than 20 per cent. were of the nature of private local services (shops, private transport, hotels, repair businesses, &c.), the residue being in finance, public local services, and a small group of trade associations, educational bodies, and other miscellaneous items. It does not seem necessary to exclude the group of private local services from consideration; they are an important part of the economic environment on which the incidence of risk is significant. It should, however, be understood that the group considered has this degree of complexity.

The fate of this group of formations, up to 1929, was as follows:

| | |
|---|---|
| Inoperative | 311 |
| Reconstructed or Amalgamated | 84 |
| Liquidated | 622 |
| Existing (1929) | 115 |
| Information wanting | 20 |
| | 1152 |

It will be seen that not much below a quarter of all the formations were inoperative; in Mr. Shannon's list the proportion was nearly one-third. Nearly all of these did not obtain any or sufficient capital. At that date, there was no Share Capital Duty on registration, so that flotations could be made on various ideas, either not bright enough or too bright. It must be a matter for regret that the Cash Expenditure Repayment Trust was unsuccessful in its appeal. The large proportion of abortive enterprises does, however, represent a factor in enterprise, an aspect of 'stimulus' in industry. Within this wider field of ideas natural selection has to produce those which are possible at any date. For example, a company promoted in the 'eighties to provide cigarettes for women smokers was abortive in the social conditions of that time. The high ratio of abortive enterprise appears to be maintained. In the decade 1893 to 1902, about 11,000 such enterprises

were dissolved, and from 1902 to 1913 about 16,000, which means about 30 and 27 per cent. of the formations of these periods. In recent years the ratio is about a quarter. When enterprise as a whole is considered, these abortives should be included, for they are signs of enterprise, but they never enter the field of the incidence of risk.

It is not possible to include the reconstructions and amalgamations in the liquidations when estimating trade risks, since the causes are various. This incidentally excludes a large number of the public service companies which were afterwards transferred to local authorities, and to that extent clears the ground of a monopolistic element.

With these exclusions we have a group of 737 companies to compare with Mr. Shannon's group of 2100. These were subject to the general risks of the market until the Great War, say for about thirty years; thereafter, the conditions of survival were scarcely representative.

In a former Essay it was pointed out that about a third of the voluntary non-liability liquidations taking place in any year should be excluded from the calculation of insolvency. As regards the group of companies formed in any year, it is more difficult to estimate this, but my impression is that it is after the fifth year that the non-significant voluntary liquidations begin to play a part. The vital statistics are therefore more reliable for the earlier than the later years.

Liquidations take place either in court (C) or because of inability to meet liabilities (L), or for other voluntary reasons (V). The last class does not mean that they were not insolvent, but only that the insolvency had not reached the point of inability to meet liabilities, when winding-up was decided on.

The table opposite is the record, which has been obtained from going through the files of all these companies.

The average duration of all the companies which have been liquidated is about 10 years; for liquidations in court it is about 4 years, for liability liquidations about 8, and for the remainder about 12. As regards liquidations in court, the

record is probably closed. If the remaining 115 companies last on an average for 20 years more, the average lifetime of the companies of 1880, exclusive of amalgamations and reconstructions, will have been about 20 years.

*New Operating Companies of* 1880 (*Total* 737)

| *Years* | *Liquidated* C | L | V | Total | *Survived* | % *of Survival* |
|---|---|---|---|---|---|---|
| 1st | 12 | 14 | 33 | 59 | 678 | 92 |
| 2nd | 19 | 28 | 35 | 82 | 596 | 81 |
| 3rd | 13 | 31 | 45 | 89 | 507 | 69 |
| 4th | 16 | 22 | 20 | 58 | 449 | 61 |
| 5th | 5 | 16 | 14 | 35 | 414 | 56 |
| 6th | 5 | 9 | 10 | 24 | 390 | .. |
| 7th | 4 | 7 | 18 | 31 | 359 | .. |
| 8th | 7 | 5 | 22 | 34 | 325 | .. |
| 9th | 2 | 3 | 4 | 9 | 316 | .. |
| 10th | 1 | 4 | 6 | 11 | 305 | 41 |
| 11–15th | 4 | 16 | 45 | 65 | 240 | .. |
| 16–20th | .. | 8 | 25 | 33 | 207 | 28 |
| 21–30th | .. | 6 | 45 | 51 | 156 | 21 |
| 31–40th | .. | 6 | 16 | 22 | 134 | 18 |
| 41–49th | .. | 5 | 14 | 19 | 115 | 16 |
| Total | 88 | 182 | 352 | 622 | .. | .. |

If we apply to these results the statement of Leroy-Beaulieu, assuming that the companies which 'are started' exclude inoperative companies, then for joint-stock business the measure of 'success' which applies to his 10 or 15 per cent. is about 40 years, and if 20 per cent. disappear 'almost at once' this means within 2 years. In estimating the incidence of business risks, it is significant to note the decease of one-fifth of the companies within 2 years, of 44 per cent. within 5 years, and of 60 per cent. within 10 years; in the circumstances, that is to say, of this competitive trade-cycle period, between 1880 and the War.

The figures of one year cannot be accepted as typical without some attempt at comparison. By the courtesy of the Registrar, the figures were supplied of the survival at some periods of all the companies formed in 1865, 1870, and 1875.

These figures include the abortive companies, but the proportion of these was fairly constant; and also the reconstructions and amalgamations. For this comparison, therefore, these have all been included in the 1880 figures, the result being of value only for general comparison; but it will be seen that the figures give supporting results.

*Survival of all Companies Registered*

| *Year of registration* | *No. of Companies* | *Operative in* | | | |
|---|---|---|---|---|---|
| | | *1870* | *1875* | *1880* | *1929* |
| 1865 | 936 | 413 | 294 | 250 | 67 |
| 1870 | 541 | .. | 241 | 159 | .. |
| 1875 | 1078 | .. | .. | .. | 125 |

*Percentage Survival at Years*

| | *5* | *10* | *15* | *49* | *54* | *64* |
|---|---|---|---|---|---|---|
| 1880 | 44 | 34 | 27 | 11·1 | .. | .. |
| Other | 44 | 31 | 27 | – | 11·6 | 7·2 |

Another comparison is possible. Since the first publication of this Essay, there has appeared the research of Mr. Shannon, which includes the first 5,000 companies, formed in the period 1856–63. After the exclusion of inoperative formations, reconstructions, and amalgamations, he has a total of 2,100, against the 737 left in 1880. His results are so arranged as to give the following comparison of the proportions of all the liquidations which took place at different lifetimes of companies:

*Liquidations (per cent.) at Periods*

| *Years* | *1856–63* | *1880* |
|---|---|---|
| 0–3 | 18·6 | 31·2 |
| 4–5 | 14·3 | 12·6 |
| 6–10 | 19·4 | 14·8 |
| 11–15 | 8·2 | 8·8 |
| 16–20 | 4·7 | 4·5 |
| 21–30 | 6·9 | 6·9 |
| 31–40 | 4·5 | 3·0 |
| 40+ | 23·5 | 18·2 |

Conditions of the time of formation would affect the amount of insolvency in early years. But if decennial periods are taken, the discrepancy is not great: 52·3 against 58·6; 12·9 against 13·3; 6·9 against 6·9. After 30 years, the companies of 1880 came into the War period.

More complete research into this question of survival of business enterprises may throw more light on the trade cycle. This section has not done more than give at any rate some substance to what has long enough been in the region of phrases and casual observations. A ten-years' survival of between 40 and 50 per cent., and a twenty-years' survival of some 30 per cent., is one way of appreciating the cost of investment in that industrial era, and in the field of joint-stock enterprise.

## III

These pictures of survival are now to be supplemented by the evidence of the course of the risk of company enterprise. It was one of Adam Smith's guesses that business failures 'make but a very small part of the whole number engaged in trade and all other forms of business; not much more perhaps than one in a thousand'.[1] In England a ratio of company failures can be obtained since 1884; in the United States a ratio is available since the 'sixties for a wider sphere of business.

I may first quote Mr. Snyder's conclusions[2] from the American figures, supplied by Dun's statistics:

'Over a period of time, one firm in every hundred in business, and one firm for each 6000 of the population fails regularly. With all the changes that have occurred in the world of business, the percentage of failures has remained a constant. It appears as though a fixed proportion is predestined to fail, that there is some psychological determinism involved. The whole character of industry has been revolutionized during these sixty years, and vast corporations have grown up, huge Trusts have been formed, and yet the individual business adventurer continues to function—and to fail—with amazing regularity.'

[1] Bk. II, ch. iii. [2] *Business Cycles*, ch. x.

The figures on which this conclusion is based are given in the Appendix. The variation of the ratio is not inconsiderable, when that ratio is based on 10,000 businesses. The total number of businesses in 1900 was over a million, so that the net was widespread. For that reason, the fall of the ratio since about that date to a lower level is not a result of the rationalization movement, which then affected a comparatively small number of great combinations, and could hardly be supposed to influence decisively the whole field considered.

As no ratio so broadly based is available in this country in respect of the number of businesses, we may compare Mr. Snyder's alternative figure—the ratio to population—with our own. Taking together my general index of company insolvency, and adding the number of strict bankruptcies since 1885, the ratio falls regularly from 18 to 14 per 100,000 of mean population, or from about 1 per 5,500 to 1 per 7,000.[1]

It appears from these comparisons that business risk, measured on these numerical bases, were becoming a smaller charge, and that Mr. Snyder scarcely does justice to the decline in the fifteen years before the War.

But when we turn to the *ratio* indices of insolvency of companies in this country, the figures have a much stronger appearance. Whether we take strict insolvency, or the broader index, or the capital involved in liquidations, the downward trend of the ratios is surprising. The two former are more than halved since 1884, and the third is halved since 1892. Now the figures are themselves correct, and their relative indices (trend removed) have been found in a former Essay to correspond with the moving indices of actual insolvencies. Yet it would be absurd to pretend that there was this rate of reduction in the risks of company enterprise.

I suggest that the fall of this trend is not all to be attributed to some special rationalization of the competition of companies, such as might arise from the growth of communication, trade association, or information of the market; but to the

[1] Appendix, Table K.

fact that the register of companies tends, as time goes on, to include a larger proportion of established businesses. In that respect, the ratio of failures would not correspond to a death-rate in vital statistics, since companies have no such limit on their span of life as persons have. It becomes more difficult for insolvency to make an impression on a total which is becoming continually healthier in its constitution. When the ratio of insolvency is taken off the Register and put on the population, we have a corrective of the magnitude of its downward trend. Conversely, the latter trend is still very significant, so that the betterment of the risk factor is greater than the population basis of 18 to 14 gives.

The consideration that the ratio of insolvency would decline if companies were to a larger extent self-financed, than if they depended on loan capital—since this would postpone the period of 'liability' insolvencies—is scarcely tenable, when it is remembered how wide the spread of company figures is. The large concerns do not make enough impression on the result, when the basis of the ratio is simply the number of companies.

It is possible to confirm the impression given by the ratios based on numbers, by some ratios based on finance. Mr. Snyder finds that the liabilities[1] in failures in the United States since 1880 declined from 4,000 to 1,000 dollars per million of bank clearings, on his index of the latter. Dun's figure of 'defaulted indebtedness' in relation to clearings (index not stated) shows, over the same time, a great betterment in the position since 1899, but not a continuous improvement. (See Appendix.)

When it is all put together, it is permissible to conclude that business risk was a declining burden, and that the decline was considerable. The competitive system could not be described as suffering from a *progressive* disorganization or chaos or welter, or any such phrases. The instability ascribed to competition under decreasing costs was being corrected by implicit and explicit co-operation of producers; there need

[1] Apparently, *gross* liabilities.

not be a strict mathematical solution of that problem if there is an increasing degree of prescience and market consideration among enterprisers. Marshall argued that this influence operated in bad times to prevent the spoiling of the market, but need it be limited in this way? His suggestion in 1890 that the risks of business were on the whole declining appears to have been correct and cautious.

There is a special feature of the risk of investment which may here be observed, namely, the nature and cause of compulsory liquidations. The pre-War Reports under the Winding-up Act of 1890 gave very full details of such cases. Their average lifetime over the years 1891 to 1913 was just under four years. Commenting on this short duration, the Registrar states that this fact

> 'excludes the idea that failure was due to the ordinary misfortunes incidental to a trading business. Such misfortunes, even when accompanied by grave mismanagement, almost invariably require a longer time for their *dénouement*. . . . The causes of failure must therefore be sought for in other directions. . . . It would be difficult, if not an impossible task, to select out of the whole number of cases wound up during the year (1891) a single case in which it could be said that the objects of the company were reasonable, that its promotion and management were honest, and that its failure was due chiefly to misfortune. On the contrary it would be easy to show as regards the vast majority that they were formed either fraudulently, or for the purpose of promoting objects which were illusory, or that their management was characterized by breach of trust, or entire ignorance and incompetence.'

That is to say, such insolvencies represent to a large extent what have been called the 'personal' risks of investment. Veblen had much to say concerning the manufacture of and trading in paper values as a type of enterprise; and arresting accounts of it have been given by some who had inside knowledge of its processes.[1] At times, some great scandal brings it again into public notice. But it appears from all the facts that it is not a type from which to judge enterprise. It is

[1] Cf. W. R. Lawson, *Frenzied Finance*.

quickly found out. Of the failures of this kind among the formations of 1880, a half were within three years; among the formations of the period from 1890 to 1913, only 35 per cent. of such liquidations survived the third year, 20 per cent. the fifth, and 8 per cent. the tenth.[1] And it is the kind of risk which shows the most rapid decline; liquidation of this kind averaged a quarter of all liquidations from 1870 to 1884, but only 6 per cent. from 1904 to 1913, and about 8 per cent. since 1918.

But these figures of trend, business survival, and rate of liquidation still leave the important question, what kind of financial results corresponded to them. It has been argued that during the pre-rationalizing period there was too great a divergence between the risk of industry and its profit. From the national point of view this would show itself in various ways—by the relation of gross to pure interest, or by the percentage of business losses to national savings or national income.

In the United States Mr. Snyder found that in the three years 1923–6 the liabilities in business liquidations were about 6 per cent. of annual savings, and not all these were entire failures. He estimates that, if the percentage of failure was two-thirds, and only a part of the liabilities represented actual losses to the creditors, the real annual losses to creditors might be put between 250 and 410 million dollars. If 16 per cent. of income was saved, the losses (to creditors) would be between 2½ and 4 per cent. of the annual savings. These may be regarded as

> 'not very important. It is conceivable that the nation's losses from inadequate or antiquated mechanical equipment, inefficient organisation, strikes and lockouts, and other economic maladjustments might exceed in a single month the entire losses for a year from business failures.'

The period covered by this estimate is a short one, under

[1] These figures are derived from the Appendices to the annual Company Reports.

good trade conditions, and is a post-War period. For this country, there exists one official estimate[1] which covers a decade, in a representative stage of the trade cycle era, the decade 1893–1902.

The financial losses of insolvency are immediately a matter of loss to individuals, but the incidence on the nation is not the same. If *A* sells to *B* something which is worthless, the price is a loss to *B*, but not to the nation, for it is a gain to *A*. The loss to creditors of goods supplied to insolvent businesses is not a national loss, if these goods had passed into the use of consumers; there was a national loss so far as the goods remained unsaleable. The loss to shareholders is also a national loss, so far as it goes into fixed equipment which cannot be employed, since the labour and materials might have been usefully applied elsewhere. There may also be complications according to the causes of the insolvency. If a new process antiquates an existing investment, the benefit of the new process is not to be deducted from the loss of old investment, unless the new process has resulted from the old investment. If not, and the new process would have been invented in any case, the fact that it was not foreseen creates a loss on old investment, which might have served its time on a smaller scale; the nation gets the new invention anyway, whether foreseen or not. Again, however, the excessive equipment of the old investment may in the interim have given the nation the advantage of lower costs and prices, which it would not have obtained on a more exact adjustment to future discovery. On the other hand, it may be said that the financial losses will have affected the economic rate of return on all investment, since the risk charges will be higher, and affect the availability of capital at any time. How far this correspondence of past losses to future charges goes, is not certain when each producer is working on his own account.

A large part, nearly a half, of the paid-up capital of joint-

[1] No. 291 of 1903 (*Report of the Board of Trade under the Winding-up Act of 1890*).

stock enterprises in the period 1893–1902 was represented by vendors' shares. There is here a large margin for difference between national and personal losses. So far as such shares are an inflated charge for the rights of goodwill or processes or of real capital, they are not a loss in liquidation to any one or to the nation if the vendors continued to hold them, but are a loss to any shareholders who had subsequently acquired them.

Subject to these considerations, it is possible from official sources to obtain a good indication of what was taking place in a representative period. Under the Winding-up Act of 1890, the Registrar had full information of the details of companies wound-up voluntarily, if the liquidation was not completed within a year. There were also complete details of companies wound-up compulsorily. As a result, there was full information for about a half of the 15,000 companies which entered on liquidation after 1890, and which were wound-up in the decade 1893–1902. On the assumption that this was a good sample of all the liquidations, exclusive of dissolutions of inoperative companies, the minimum financial losses for a decade are estimated as follows, in thousands of pounds:[1]

| | |
|---|---|
| Vendors . . . . . | 180,000 |
| Public: | |
| Contributors . . . . | 165,000 |
| Unsecured creditors . . . | 38,000 |

The first method of estimating the incidence of these losses is by an estimate of the risk charges which they would actuarially create. The total paid-up capital of all the companies involved in liquidations entered on during the decade 1893–1902 was 560 millions, about equally divided between vendors and the public. This figure is only slightly lagged on that to which those of losses strictly apply. Companies entering on liquidation go off the register, so that this average of 56 millions has to be added to the average paid-up capital of registered

[1] H. C. 291 of 1903. An error of tabulation being corrected.

companies during this period—1,229 millions—the average capital at risk being 1,285 millions. The average capital loss of 35 millions was then 2·7 per cent. of the operating capital. It is not necessary here to scale down vendors' capital, as it enters on both sides of the ratio.

Now in this decade the average real rate of return on Consols was 2·6 per cent. This may be taken as the measure of pure interest. It would appear, therefore, that the economically necessary rate on company enterprise under the conditions was 5¼ per cent., with some addition for uncertainty. Gross interest was at least twice pure interest—Adam Smith's random guess. It is not easy to continue up to the War; but the rate of liquidation was certainly falling, while the real rate on Consols rose in 1903–13 to an average of 3·4. Gross interest would still be over 5 per cent., plus the uncertainty charge, but would now be at least 1½ times pure interest. A pre-War economic rate on company investment as a whole might be in the region of 6 per cent. This was, in fact, the normal rate taken by the Referee under the Excess Profits Duty Act, so that the approach to it by the route of insolvency is shown to be valid.

Another method is to try to find, even if it can only be a minimum and an approximation, the relation of the losses to the national income and savings. In various discussions of this matter, the particular results given for the decade 1893–1902 do not appear to have been used.[1] The decade is well placed in the history of the industrial conjuncture for a typical estimate of this kind.

There are great difficulties in making any estimate on the basis of real values. In such an estimate, the losses to creditors would not count, since they would have supplied goods to the nation at their own loss; unless these goods were wasted or unsaleable, or saleable only at sacrifice prices below the value of the resources put into them. As we do not know, this is too vague a field to enter on, and it presents the same problem as

[1] For a discussion, *v.* Stamp, *British Incomes and Property*, pp. 181–7.

regards the much larger creditors' losses in bankruptcy. The difficulty recurs in the estimate for comparison of real income and savings, of which we have a reliable figure only in the Census of 1907.

And in any case, the risks out of which the problem of rationalization arose, and which are in question in estimating the pressures of competitive industry, are the financial risks of persons. It is safer to proceed on these lines, since there are available estimates of the aggregate of national incomes for comparison.

I am aware of the difficulties which have beset past attempts to measure these losses; and Dr. Stamp's discussion of the subject is a warning. But the attempt should be made, not only to obtain some figure of the losses, but to relate it to other indices. The indices which it seems best to bring in are those of the national income and the national savings. This implies both a capital and an income interpretation of the Registrar's figures. They are certainly more definite figures than any of those mentioned in Dr. Stamp's discussion; but they are for companies only, and require to be supplemented by an interpretation of the figures of bankruptcy.

The annual average losses in bankruptcy in this decade, Deeds of Arrangement being included, were nine millions, for creditors only. It is plain that in bankruptcy there is a large proportion of insolvency that is not of the trading kind with which we are concerned: I accept the Registrar's estimate that one-third should be deducted, leaving the losses at six millions. But we do not know the debtors' own losses, as we do for companies. In the statement for the latter, the shareholders' losses are over four times those of creditors, if all vendors' capital is excluded, and from five to six times if it is taken at one-third of its face value. But it has been mentioned above that private traders have had more than the usual degree of credit given to them, and their capital equipment must also be relatively less, so that I suggest that their own losses may be guessed at twice their liabilities. This would give twelve

millions of losses for them, or a total of 18 millions of loss in bankruptcy.

As regards the capital losses in companies, the Registrar states, what is well known, that the greater part of vendors' capital is inflationary, and I do not think it is severe to mark this item down to one-third of its nominal amount, or six millions. The total of the capital losses is therefore 22 millions, and the total loss on company insolvency is 26 millions.

There was therefore a total of lost resources of about 44 millions at that time. The inquiries of other investigators have aimed at getting a single figure of this kind, and leaving it to speak for itself. But its significance depends somewhat on the other surrounding facts, such as the price level. A relative figure is to be preferred, but its estimation in this case raises some questions on which there might not be agreement. Primarily, therefore, we may say that at a representative period the nation was losing 44 millions a year of resources.

We cannot add together both capital and income losses, and it is implied that the creditors in companies and bankruptcy were losing resources, and not merely income. No doubt, the losses of some creditors would come out of the dividends of other companies, and would be felt by them as income losses. But, however they are borne, we must suppose that these were resources from which an income could have been derived, and not to any significant degree unpaid services. They are then addible to the investors' own losses.

The 44 millions of loss may first be related to the national income. The estimates of this which most closely cover the period in question are those of Bowley and Giffen. For 1891, the income was estimated by Bowley at 1,600 millions, and for 1903 by Giffen at 1,750 millions. In each of these years prices were high relatively to the decade covered. But Bowley's estimate of the income above the exemption limit shows an almost continuous increase from 1891 onwards,[1] so that the decade may be averaged at 1,650 millions. This is for the

[1] *Manual of Statistics*, p. 177.

United Kingdom. On the basis of gross assessments, England and Wales would have 1,500 of this.

Now, resources of 44 millions would, at the economic rate of 6 per cent., mean a continuing income of about 2½ millions. But I do not think this is the loss of competitive insolvency. These income losses are not only offset by, but are largely due to, other competitive gains, and the failures make room for the more successful. We must regard this loss as wearing off. The income of any year is not loaded with standing charges for all the past losses of capital. The gap closes, and the past buries its dead. This is especially so with competitive losses. If we regard this 2½ millions as wearing off in a decade by annual equal reductions down to a quarter of a million in the tenth year, then each year is responsible for income losses of about 14 millions; and each year also bears that as an accumulation from past losses. The result is to show that the average income was subject to a loss of about 1 per cent.

The capital loss may be best compared with the new savings. To these, it acts as an offset, which diminishes their full effect. The loss has accumulated from former years, but is reckoned against the year of its declaration. A decade averages out this process. The great preponderance of insolvency is in early years of business. The 44 millions of declared losses had, at that moment, a face value of about one-sixth of the annual savings. I do not think that any more exact statement can be made.

The chief guess in this argument is in respect of the debtors' losses in bankruptcy. I do not think that I have unduly written down the vendors' capital. The estimate of Mr. Ireson, quoted by Stamp,[1] comes in this respect to the same result as on my method. He deducts one-third of the whole paid-up capital. But his estimate of the company losses alone, over a period of forty-four years, is equal to the total losses obtained on my argument. His estimate of total losses is 100 millions, which Stamp regards as 'much too high'. Mr. Ireson's

[1] *Op. cit.*, p. 184.

figures are based on all the companies registered from 1862 to 1906, but at least a quarter of these were never operative. Sir Leo Money has also a much higher estimate than mine. But I think that the investigation of the Registrar, which I have used, is a safer basis than any other that we have for the estimation of these losses, and an important social document.

On the other hand, the results reached in this Essay are much less favourable for this country than those given by Dr. Snyder for the United States, an even more capitalist country. These have been referred to. He finds that over three post-war years, the losses from insolvency were only from 2½ to 4 per cent. of the national savings, which he also takes at one-sixth of income. But I think that this difference is due to the fact that Dun's statistics appear to include only the liabilities to creditors; they are at any rate difficult to interpret clearly. In addition, Dr. Snyder is considering three post-war years of good trade, while the figures used here cover a decade of varying conditions, and apply to a representative period of enterprise, when that was beginning to be spliced on to the pre-war rationalization movement.

The figures regarding business risks have now been presented from several points of view and, before making any summary, the purpose in view is to be recalled. That purpose is not simply statistical. What is desired is to estimate the significance of the movement now called rationalization, in relation to the industrial stresses out of which it arose. It was just in this decade, the nineties of last century, that the great rationalizers came forward in England, Germany, and the United States, with their projects of Trusts and Cartels. They presented to their critics lists of the economies of combined operation, and these lists of a generation ago have had nothing added to them in recent arguments. They were tabulated in numerous text-books thirty years ago, and were a common question in academic examination papers. But they did not filter through into the general attitude of business

leaders, until the post-War reconstructive period had forced attention on the special conditions the War had created. The facts concerning company liquidations in this country show that the nineties of last century were marked by an unusual increase of reconstructions and amalgamations; the post-War period is a second phase of this. There is this difference, that instead of an attitude of opposition to Trust leaders, the Government is putting pressure on competitive industry to trustify itself. And this indicates something more, namely, the extent to which the movement of thought in industrial structure is evolutionary, and depends on the course of events. Pre-War ideas on Socialism and capitalism have both been demoded, and accommodated to an evolution with which they move in parallel.

Now the rationalizers said two things—first, something retrospective about the risks of the competitive system, and second, something quite independent of that about the economies of higher organization. This double ground is quite clear in such evidence as was given by the Trust magnates before the American Industrial Commission about the year 1900. But they found it at that time not very easy to obtain assent for their list of economies, which is the proper ground on which to base the case for rationalization; and so they reinforced themselves by applying strong terms to the competitive system, and had the support of Socialists in so doing. The list of these terms is picturesque and varied—excessive, chaotic, cut-throat, brigandish, and so forth—so much so that competition came to be regularly accompanied by one or other of its literary epithets, as if it had no normal being of its own, though economists were still studying its normal tendencies and equilibrium.

Now an economic organization is justified only by its future contribution to economy, and *any* degree of higher organization is not sanctioned by reasons of the past. It may have a motive there, in that competitors cannot charge the economic rate on capital, but can only endeavour to get it. Even a

higher organization cannot cut out all the losses that might have been avoided, and the Trusts were the great inventors of new competitive trade practices. Then, as after the War, the main question had to be future economy rather than enterprisers' risks.

Now, what this study of the risks of investment yields in results may be summarized as follows. The risks of business were declining; Mr. Snyder's work confirms this for the United States. At a typical period, they represented a doubling of pure interest for joint-stock operations, with a gross rate of 6 per cent. Of operative companies formed in 1880, 30 per cent. *disappeared* within three years, 44 per cent. within five years, and 60 per cent. within ten years; the figures being a few points better for the first years of companies formed in 1890.[1] These were the business leaders' facts.

The social investigators' facts were that all insolvency meant losses of some 1 per cent. of the national income (Snyder gives 1 per cent. of businesses), and an offset of accumulated loss which made new savings effective to the extent of five-sixths of their face value.

It must be a matter of opinion, but I do not think that these results are strong enough to support the 'chaos and welter' arguments. Snyder thinks that, for a progressive society, the results were 'not very important', but my results are more important, in that sense, than his.

Suppose, then, that this incidence was typical, how could it come about that, in the absence of what is now called planning, figures of greater magnitude were not obtained? Because, while there are planned orders, of which an army is an example, there are also integrated and co-operative orders of various degrees. The competitive system had many forms of integration, through the growth of the services called the external economies, and the net balance of integration and independence has been a matter of continuous adjustment. An increasing amount of attention is now being given to the study of im-

[1] C. 7779, p. 63. (Registrar's evidence.)

perfect competition, which, by giving to producers elements of goodwill in their business, prevents the market from being entirely random as between buyers and sellers. This is not an aspect of monopoly, but merely of the attachment of some buyers to some sellers at the general prices of the market, as a matter of custom and arrangement. It is advantageous to producers that such connexions exist, and that their markets are not random. Facts of this kind have tended to rationalize the system of private enterprise. The custom of goodwill develops into the integration of buyers with sellers, in the special sense of the word integration as a 'vertical' union; and Snyder believes this to have been a very important factor for the explanation of his own results.[1]

This does not mean that we should not always consider the range on which plans can be applied in industry. The wider the range of an economic plan the better, while it remains economic. And that is a consideration of future economy, depending on the best fit of policy, administration, and technique. Enough has been said of this in a previous Essay. But it appears to me that the rationalization movement, in its pre-War origin, was better based on its well-known, and more recently sanctioned, list of future economies than on its reflections on the competitive order and risks.

I think that in the post-war revival of the same movement we should keep this in mind. The unsettlement of the political and economic conditions has intensified the risks of enterprise, and adjustments have to be made. But I think we should be careful about attributing such exceptional conditions to a breakdown of the old order of enterprise. When there is so much to do in restoring the organization of industry to what will work as conditions become again more settled, we are apt to give a dramatic effect to these efforts by describing them as the endeavour after a new order. Indeed, as has been often stressed here, the ideas of rationalization were being worked out by industrialists before the war, although not then

[1] *Business Cycles*, p. 192.

endorsed by publicists, and our best efforts are being given to restoring and advancing these ideas.

Still more, I do not think that for this purpose we can speak of requiring a new economics. There can, in my view, be only one study of economics. Its work is to interpret tendencies and search for the causes and relationships which obtain in this field. We cannot write economics in order to prove certain results. I think that here also we may be seeking a too dramatic expression for our efforts to understand the present exceptional conditions.

### *Note to Essay IV*

## ORDERS, SYSTEMS, PLANS, AND ARRANGEMENTS, IN THEORY

The distinction mentioned above between different kinds of order, planned and co-operative, may be developed by reference to the economic theory of private enterprise. The three terms order, system, and plan are not interchangeable. A plan may not give a system or an order in its effect, as distinct from its idea; that depends on those who plan, on the range of plans, in extent and intensity, and on whether the plan is consonant with the conditions on which it can get the resources it requires. It may want resources, especially in personnel, which have not reached the stage of being ready to come within the ambit of wide plans; or which lose their value when they come under plans. Other resources may be enhanced by being brought into economic plans, such as the resource of the desire for public service. We ought at any rate not to borrow for economic life the assumption on which plans are possible elsewhere, e.g. in the military or political sphere. It should also be remembered that approval of a state of things, which may be called an order or a system, but is not planned in a strict sense, may depend on a remoter kind of plan; for example, free trade, being a non-interference, may seem to be the opposite of any such plan as a tariff system claims to apply, but may be adopted or continued on the ground that it is held to contribute most fully to national wealth. It is these final conceptions of the tendency of a 'state of things' which enable them to be called the

free trade 'system', or the 'system' of private enterprise. In this way, a certain degree of defect in order may be a condition of the best plan. It should be remembered that *laissez faire* began as a protest against Colbert's planning, not as a dogma. What is called in the text of this section a 'co-operative order' is an accepted state of things (to use the most neutral expression) which appears to contribute the maximum to a final purpose or idea (wealth or welfare) without the maximum of technical or administrative arrangement.

We should not borrow into economics or any human study the implications of planning in, for instance, engineering. Roads, buildings, and towns must be planned on one scheme at one centre, and everything must take its place in the scheme prepared. In the human sciences the material is not inert, and there is the question whether a number of lesser purposes can adapt themselves to a result as well as a single purpose can adapt them. This is mainly an inductive question, depending on the field we are considering, and not soluble merely by using the idea of unity as opposed to diversity, or any metaphor or analogy. Plans, in the recent sense, as well as orders or systems which are not in that sense plans, are all States of Things for examination in the light of what is the real Plan, the contribution to final well-being.

As Marshall is the most admired and criticized of modern economists, and his terminology has been generally borrowed by others, it is best to consider what his analysis yields. His concepts of control are two—*substitution*, and the *representative business*. It is to the extent to which, between them, these concepts succeed as regulative factors that we can speak of the 'co-operative order' as a working account of competition.

It is unnecessary to explain his account of substitution as it is used by the individual employer. Within any business, the employer arranges things on the best plan for his own purpose, so as to prevent wastes, overlaps, and so as to have the right proportions of his labour and capital. But no one employs the employers as he employs his own agents. This hiatus is granted, for 'while it is through their (business managers') conscious agency that the principle of substitution chiefly works in balancing one factor of production against another, with regard to them it has no other agency than the indirect influence of their own competition. So it works blindly, or rather wastefully' (*Principles*, p. 663). Much

of his analysis is an endeavour to lessen the seriousness of this hiatus.

Of course, the difficulty is not obliterated in any planned order. For whatever persons or authorities are responsible for the administration of a plan will not be subject to the efficiency control of substitution either. The final authority will be final, and the guarantees of its efficiency will have to be looked for in some general forces or influences, such as public criticism, or in the 'sanctions of rationalization' discussed in a previous Essay. But there are indirect controls, and such are these which Marshall appealed to. We cannot, in any economic system, get away from the fact that a vital influence on efficiency has to be obtained through inter-actions, and cannot, in a full explanation, entirely substitute a central plan for all these interactions. The contrast between the multiplicity of private enterprisers, and the unity of a plan, is only a skeleton formula.

In the analysis of Marshall, the interaction of substitution as between enterprisers has two forms—one vertical, one lateral.[1] By the former line of argument, he seeks to show that business management is related by continuity of substitution to subordinate grades of labour; there is efficiency comparison between grades of ordinary labour, between workmen and foremen, foremen and managers, the suggestion being that this continuity finally reaches to the direction of enterprises itself. In this analysis he sometimes argues downwards; e.g. when he considers the owner of a business making a decision whether some of his own work will be better done if delegated to a manager, leaving himself free for more general supervision. These are marginal vertical adjustments, the suggestion being that the diverse grades of labour are thus all related to each other by efficiency comparisons, so that management and direction are included in the real action of conscious substitution of the better for the worse.[2] This endeavour to obtain a vertical continuity for the efficiency test is somewhat qualified by Marshall himself; because he grants that the work of management (direction) can never be classed with 'mere routine superintendence',[3] that business leaders are 'to a

[1] I have discussed this at greater length in papers on 'Earnings and Surpluses' in the *Economic Journal*, Dec. 1908, and on 'Profits' in the *Wirtschaftstheorie der Gegenwart* (1927), vol. iii.

[2] *Principles*, pp. 313 and 663, for summary accounts of this influence.

[3] Ibid., p. 613.

certain extent a class apart',[1] their ability being to a large extent non-specialized, 'depending little on labour and expense applied specially to obtaining it, and much on natural qualities'.[2]

Therefore the vertical influence of substitution is supplemented by its lateral influence, and this has more than one aspect. Partly it is simply the competition of enterprisers, aided by the unspecialized nature of their function, and by the growth of external economies which are open to everyone; partly it is influences of criticism, emulation, and sympathy, which are easier to name than to define. It is these latter general influences which are most liable to be eliminated in skeleton constructions of the business world. They are not limited to the defining of the equilibrium of efficiency in private enterprise; higher planning also depends on them. 'The modern intercourse of expert officials with one another is bringing into the business world some part of that great progressive force which pure science has long derived from the approbation awarded to successful research by audiences fit, though few.'[3] The indication of general social forces is always liable to come under the suspicion that it is a flight from argument into assumed harmonies. But economic sense depends largely on appraising such influences properly. They constitute in a competitive order a substitutive force between $A$, $B$, and $C$, all of whom exist and operate in similar spheres, and, in a planned order, a substitutive force between $A$, who is entrusted with the function, and $B$ or $C$ who might be summoned from anywhere to perform it instead. With the aid of these lateral forces of substitution Marshall believed—and this is the point of divergence between his analysis and that of a Plan—that efficiency interactions were generally strong enough to 'put business ability in command of the capital required to give it scope'; so that an order was workable, on the scale of resultant risks shown in the text of this Essay.

In particular, he thought that enterprise was saved from the worst disorganization in a time of depression by a sense of the market which kept enterprisers from cutting down to, or below, prime costs; the 'fear of spoiling the market'.[4] Only business men themselves can pronounce on the efficacy of this control. But, if it exists, it is not clear why it should be limited in application to a particular condition of the market.

[1] Ibid., p. 663.
[2] Ibid., p. 606.
[3] *Industry and Trade*, p. 326.
[4] *Principles*, p. 374.

To these influences of substitution, vertical and lateral, is to be added that of the 'representative business'. This is made to play the part of a control in an indirect way, as has been indicated. The flow of resources is prevented from irrational direction, and is made to depend on actual observation of the conditions of certain typical businesses. 'If the net earnings of such a representative business seem likely to be greater than he could get by similar investments in other trades to which he has access, he will choose this trade.' And 'we can see it (the representative business) by selecting, after a broad survey, a firm, whether in private or joint-stock management (or better still, more than one), that represents to the best of our judgement, this particular average' at which we need to look in order to estimate internal and external economies. (P. 318.) The control over investment which is here suggested is therefore dependent on the example of actually existent enterprises, which are judged to be normally well managed, without exceptional advantages, and to have lasted long enough to use fully the advantages of the conjuncture. Here is firm *A* or *B*, it has taken it so many years to reach a position of normal success, without any abnormal advantages, and new resources, to provide for the growth of society, direct themselves by such examples of opportunity and period of organization; but this control of new investment is limited, apparently, to established industries. Any business leader would probably write down a number of the more detailed considerations which would induce him to regard such existing types as representative; for example, the phase of the industry as a whole, whether that is representative of its immediate future in a particular place or country; he would differentiate, in the mathematical sense, the function of representativeness. Only a business leader could clothe the idea with all its particular conditions. But it appears that the idea itself has become a current concept in actual business discussions and inquiries. When we are looking into the theory of the forces of check and balance, which account for the possibility of a co-operative order, as opposed to a centrally planned order, we have to state to the full measure what the controls are. There is more than a mere multiplicity and diversity of uncoordinated enterprise. Plans themselves are better understood if opposed, not to a short-cut impression of chaos, but to the co-operative order they wish to supersede. On what principles of comparison they may supersede them, was the purpose of the Essay on *Sanctions of Rationalization*.

# V

# SOME ASPECTS OF RATIONALIZATION[1]

[The extent to which available economies of production will be found out and used, and the spirit in which schemes for higher organization will be carried out, depend largely on the possibilities of industry as a field for personal leadership and authority, in a manner which is comparable with such opportunities elsewhere. The pre-war magnates have become the post-war rationalizers. This Essay deals with some aspects of this new status of the great industries. There is an increased desire for 'running full' in respect of personal capacity, an increased scope for personal authority, and an increased complexity of inter-connexions. Prices are more administratively 'managed', and adapted to the longer aims of industrial development. International agreements between great enterprises may cause this power of management to go beyond the limits of national industrial policy, unless there is some limit to the scope of such agreements. Higher organization opens out some possibilities of creating labour interests in industrial government, and of methods of financial advance and recovery for the purposes of industrial peace, and perhaps of the lessening of unemployment.]

A VERY remarkable change took place after the war in the expression of both public and economic opinion in respect of what may generally be described as the problem of industrial leadership. In the former period the growth of great concentration of control over production was regarded with distrust, and as a thing which had to be carefully watched in the interests of the community. While it was admitted that the old theory of competition was not working without disadvantages, it was believed that, all over, these were less than the disadvantages which might result from anything monopolistic. For there was no settled opinion that, alongside of the growth of Joint Stock, there had not grown up conditions which qualified the risks of competition; transport widened the market, there was a great organization of market intelligence, big concerns knew more about each other, and in many ways they co-operated more fully than would have been possible if they had remained more numerous and less powerful. There was a recurrence, before public commissions

[1] Presidential Address to Section F of the British Association, Leeds, 1927.

and inquiries of all sorts, of the producers' view that competition had become anarchic, chaotic, excessive, unregulated or destructive. But this kind of complaint did not translate itself in all countries into the obvious methods of remedy by combination. It was always said that British producers remained comparatively individualistic in their attitude, meaning that they were unconvinced by the arguments used elsewhere. The American combination movement was often explained by the special effect which her high tariffs had in over-capitalizing protected industries, and causing on that ground an excessive competition that need not have happened. Again, it could not be said that, given private enterprise and the risks it implied, there was such a tendency to bankruptcy as to show an irrational position. Over the period 1903 to 1912, for instance, the *gross* statistics of the liquidations of companies in England were on the average as follows:

| *Companies on the Register* | *Paid-up Capital (1,000's)* | *New Companies* | *Liquidations* | *Capital involved in liquidations (1,000's)* |
|---|---|---|---|---|
| 40,101 | 1,862,107 | 5,028 | 1,860 | 54,531 |

This was an average rate of liquidation of 4½ per cent. of companies, *involving* 3 per cent. of the capital. It is not an unqualified record of competitive results, because no country was without some extent of combination. But it is the record of prevalently competitive conditions, including those which obtained under partial forms of combination.[1]

Public and economic opinion had come by stages to tolerate, approve, and recommend labour combination. But the conditions are different, because an individual workman is not related to others, as one business concern is to its competitors. Labour is necessarily employed in groups. In any case, trade unions applied to only one factor of production, but combination of businesses applied to the whole product as it came on the market.

[1] These figures are, of course, not comparable with vital statistics.

Thus, on the whole, the combination movement was a 'problem'. Books were written under such titles as *The Trust Problem*, *Wealth against Commonwealth*, *Frenzied Finance*, *Trusts and the State*, *The New Feudalism*, and so forth. To call a certain result a 'problem' does not mean that it must be stopped, but it implies doubt, refusing to certify the results as rational and inevitable. The United States in particular legislated to break up combines of a certain degree, and to impede their methods of working.

## II

The post-War tendency is to change this attitude. The alteration in point of view is very remarkable. Any one can see this who reads the documents submitted on the subject to the first World Economic Conference. One writer confidently states that the right thing to do now is 'to form as many international agreements of producers as possible'. But these agreements usually presuppose national combines which are parties to them; and if world economy requires the combine formed by agreement (the cartel), then *a fortiori* of the national economy.

This change of attitude has been urged both on public opinion and on producers under very high auspices. The Reports of the Reconstruction Committees on British Industries after the War are unanimous in asking for a change of the public attitude toward producers' combinations. The Report of the Balfour Committee on Efficiency puts questions of combination in the forefront. It is not easy to appreciate this without considering the future to which such an impulse may lead, in respect of our attitude toward organization. There are three large conceptions that are related to each other—competition, combination, and public administration. A change equal to that which has taken place in reference to the first two of these would carry us far from the second toward the third. Public industrial administration, in its broad features, is as much, but no more, distrusted now by prevalent

opinion than the Trust Movement used to be. It is well to keep this in mind in dealing with the recent evolution of opinion.

The change is due to a few separate causes. The war enforced a good deal of co-operation, since the Government had to deal with producers as a group in their industries. In some industries it led to constructions which the market could not afterwards carry at their capacity, and combination is a method of regulating excess of capacity. In some cases governments have, because of special national interests, been a party to the formation of large combines. All this influences opinion. But most important of all, as the Geneva documents show, has been the reaction upon national ideas of the international industrial proposals. The formation of the International Steel Agreement was a powerful influence in this direction. There were two special reasons for this—its semi-official support by the political governments involved, and, above all, the fact that it could be presented as a form of pacification between Germany and some of her former enemies, especially France. If this could be done once, it could be done again. There had formerly been international agreements, it is true, but they were not so sure of their welcome as they might be after all that was written of the Steel Cartel. Their claims became more confident, and this meant that combines within each country were also placed in a more favourable position than before.

The leadership came from Germany, and for that reason we have now the ponderous name of 'rationalization' to describe *methods* which depend upon this *policy*. This word may be used of such results of large-scale production as standardization, and it is also used of the more broadly applied system of scientific management. This Essay is not concerned with these aspects of the idea. It is obvious that internal business administration should be scientific, and it is entirely for the heads of businesses to discover the right technical methods; the 'planning' of work seems to an outsider to be something which ought always to happen, and it is remarkable

that this *general* conception should still be taken as noteworthy. Standardization of final products seems, from the public point of view, less completely rational than simplification of processes. But, from such bases, 'rationalization' has been built up so as to imply the right organization of an industry considered as a type of government, the producers being so related as to enable such policies to be applied as works specialization, non-destructive elimination of the weak, and the control over the entrance of new establishments. Now this in turn implies some degree of monopolistic control. And it appears to be historically the case that, when the leaders of German industry found themselves, after the war and the Treaty of Versailles, in conditions confused by inflation and the loss of the sources of supply in the Rhine Provinces, they sought to justify the great combines which were formed by a title which would give them the strongest commendation. Pre-War Germany did not like Trusts or Concerns. For a time at least, strong personal leadership seemed necessary after the War. And the conception of 'rationalization' which was adopted and urged, as the highest form of what was scientific in business management, had a successful flotation, and has crept into the terminology of organization of industries.

The World Economic Conference of 1927 did not give to these claims the endorsement which they hoped to obtain. We get only the conclusion that combines may be good or bad according to the motives and outlook of those who direct them. This means that, as economists, we have to return, without any prejudice from names and titles, to the study of a stage of evolution, taken as actual. The change in public opinion must no doubt also be taken as a fact. But this is a thing which may at one time swing toward the producer, at another toward the consumer, according to the conditions of the economic conjuncture. At present the difficulties of the producer are more prominent than usual. On the other hand, in the immediate post-War boom, we had the Committee on Trusts, the Profiteering Act and its Committees, and a different

attitude toward what had not yet come to be called rationalization. From any long point of view, a perplexing problem is offered, because if on the one hand it is held that industrial joint-stock competition is becoming irrational in intensity, and will be destructive of itself as one industry after another reaches an advanced stage of capitalist organization, on the other hand monopolist tendency is also unstable in face of public criticism. Hence some dread, and others hope for, more attention to the third method, that of public control, applied at any rate in some large instances.

## III

But it is still possible that, besides the insecurities and instabilities of competition and the dangers of monopolist influence, there may be another idea according to which private enterprise may work out its future. This is the idea of leadership. It was the view of the Balfour Committee that, if industry was to be adequately responsive to changing conditions, and was to develop co-operation amid competition, it would specially need 'the exercise of the highest qualities of imaginative leadership'. If we compare industry with the other great systems of administration—political, military, and ecclesiastical—it is evident that the latter exist as systems because leadership has a definite place within them. They are organized under this form. In industry the fact is tending to obtain more consideration, but the question is of its formal recognition and status. Policy means leadership, and leadership means control; to control anything well, it is necessary to control a large part of it; and industry is so far from being, as regards conceptions of organization, regarded alike with other organized forms of activity, that definite leadership has to overcome objections of a quite unique kind. This is because of a fundamental difference between industry and the public services, *in respect of their immediate aims*, and of their *relation to the idea of responsibility*. It will later be seen how this affects arguments relating to industrial control, and to

the creation within industry of any sort of employees' franchise —an idea brought over from politics, on the implied assumption that politics is the type of democratic and responsible control. Meanwhile it is necessary to show how evolution has created the leadership in industry which seeks to confirm its position by combination, but whose 'sanctions' create the industrial problem referred to above.

An analysis was made of the data furnished to the manufacturing Census of the United States in 1919, which showed that, even in that country of large enterprises, the home of the Trusts, most businesses still operated single establishments. Grouping of establishments under one control, extending from groups of two to groups of over a hundred establishments, accounted for only about 7½ per cent. of all the establishments operating.[1] The large groups which make possible a strong personal leadership in industry must, therefore, still account for a small percentage of all the producers. The persistence of the producer of small or moderate size is still a marked feature of modern industrial organization. The following analysis of the facts may be taken as a basis of the present position. It refers to manufacturing industry, exclusive of what are called 'hand and neighbourhood (or local)' industries, such as the village blacksmith. No establishment is included which did not have a product worth 5,000 dollars in a year.

| *Wage-earners per Establishment* | *Establishments per cent.* | | | *Wage-earners per cent.* | | | *Establishments (1,000's)* | |
|---|---|---|---|---|---|---|---|---|
| | *1923* | *1914* | *1909* | *1923* | *1914* | *1909* | *1923* | *1909* |
| 0–5 | 44·6 | 42·7 | 39·8 | 2·5 | 2·7 | 4·7 | 87·5 | 68·9 |
| 6–20 | 27·8 | 30·5 | 32·9 | 6·9 | 8·7 | 9·7 | 54·6 | 56·9 |
| 21–100 | 19·1 | 19·1 | 19·9 | 19·3 | 22·2 | 23·4 | 37·6 | 34·5 |
| 101–500 | 7·1 | 6·6 | 6·4 | 33·0 | 34·7 | 34·2 | 13·9 | 11·0 |
| 501–1000 | 0·9 | 0·73 | 0·69 | 14·1 | 13·5 | 12·7 | 1·8 | 1·2 |
| 1000 and over | 0·5 | 0·34 | 0·29 | 24·2 | 18·2 | 15·3 | 1·0 | 0·5 |
| | | | | | | | 196·3 | 173·0 |

Thorp, *Integration of Industrial Operation.*

In this distribution the number of the smallest establishments in 1923 is inflated by the change in prices, which would bring within the range of the Census a large number which would otherwise have been below the 5,000-dollar limit. Allowing for this, the persistence of establishments of moderate size is notable.

The average size of establishment in that country, when allowance is made for changes in classification, had increased since 1899 as follows:

| *Establishments* | *Wage-earners per Establishment* | | |
|---|---|---|---|
| | *1899* | *1914* | *1923* |
| All . . . . . . . | 22·7 | 25·5 | .. |
| Over 5,000-dollar product . . | .. | 38·6 | 44·7 |
| Index . . . . . . . | 100 | 112·3 | 130·3 |

the figure for 1923 being, in view of the classification and of prices, too small.

When account is taken of contribution to the national product, the data for 1923 show the following result (which was practically unchanged in 1929). This next Table shows

| *Value of Product (1,000 dollars)* | *Establishments per cent.* | *Wage-earners per cent.* | *Product per cent.* |
|---|---|---|---|
| 5–20 | 31·6 | 2·2 | 1·1 |
| 20–100 | 36·9 | 8·2 | 5·7 |
| 100–500 | 21·4 | 19·6 | 15·7 |
| 500–1000 | 4·9 | 12·9 | 11·1 |
| Over 1000 | 5·2 | 57·1 | 66·4 |

in the most striking way the degree of leadership which has been obtained by the small number of large establishments. And so far as it is large establishments which enter into combinations, their influence over policy and prices is increased.

More detailed examination of particular industries shows that it is not only in the great industries that this result holds good. No relation exists between size of industry, expressed

in persons employed, and scale of production, or concentration of power. Some quite small industries stand high on the list by both these tests.

Germany is more typical of older countries where family businesses have played a larger part than in America. In Germany, also, the Cartel system was, until the War, the usual way of obtaining control, and it tended, as compared with the Trusts, to maintain the smaller establishments. The following gives a pre-War comparison, from which the very small establishments are eliminated:

| | *Per cent. of Establishments* | | *Per cent. of Employees* | |
|---|---|---|---|---|
| *Establishments employing* | *U.S.A. 1914* | *Germany 1907* | *U.S.A. 1914* | *Germany 1907* |
| 6–50 | 75·5 | 87·1 | 20·0 | 35·2 |
| 51–100 | 10·8 | 6·7 | 11·8 | 15·4 |
| 101–500 | 11·4 | 5·6 | 35·7 | 32·8 |
| 500+ | 2.0 | 0·6 | 32·5 | 16·6 |

For France, the general form of the table at the Census of 1921 is similar. As regards this country, the only data available are those of the capitalization of joint-stock companies. Over the period 1919 to 1925, of all companies registered, only 2·6 per cent. had a capitalization of over £200,000, while more than 67 per cent. were capitalized below £10,000.

In the conditions which these results show, the largest producers inevitably feel themselves drawn together in order to create an administration for their industry. Evolution has given them a possible leadership which they desire to confirm. The large fringe of smaller producers is felt to be an obstacle to this purpose. The position of the large producers gives them an oversight over the market the confirmation of which means the organization of the industry against inroads and uncertainties, overlap, and weak selling, and it is this further organization which is presented as industrial rationalization. Hence the terminology which is applied to the excesses, or destructiveness, or anarchy of modern industrial competition.

As a matter of industrial psychology, the desire to be at the head of wide-reaching organizations may have just the same motives as the desire for control in other spheres. It comes up against the same problem of exceptions which political, military or ecclesiastical organization wishes to incorporate in a system. It may indeed be said that, upon the possibility of creating in industry, and reconciling with public opinion, spheres of influence which will make industrial leadership as attractive as political or any other form of leadership, depends the supply to industry of the highest organizing ability. There are recent cases in which, when such a sphere in industry was open, it has been preferred to political office. As compared with the services just mentioned, industry had, however, to evolve into a condition of large and influential units of enterprise, in order that any further step might appear possible. The data quoted above show how this position has been reached.

## IV

In the problem of industrial organization there is involved an element which does not belong to the other great types of organization. In the latter, the desire for efficient unity of control, strengthened by personal aspirations for great influence and authority, is not complicated by the special industrial fact that the resources involved are personal and subject to the risk of loss. It is in all the cases regarded as of national importance that resources should not be wasted or lost, and the desire for rationalization appeals to this conception of general economy, but industry is unlike other administrations as regards the origin of resources and the incidence of liability. It is necessary, therefore, to consider to what extent the evolution just described affects this liability, as distinct from the pure impulse to higher organization; that is to say, what is the place of mitigation of risk, as compared with that of leadership itself, in the movement for combination.

Leadership may be got either by fighting it out, the 'method

of bankruptcy', or by some method of absorption in one organization. It is one of the claims of the combination method that, whether by Trusts or Cartels, the latter is adopted, so that the fringe of smaller businesses is more humanely or rationally dealt with than under the former method. On the other hand, the maintenance of over-investment in this way is often the basis of criticism of modern combines, because somehow it must be a charge on the community through prices, so that it is asserted that it is not the rational way of creating system.

And on the other hand, leadership may be maintained by steps taken to prevent or impede the entrance of new enterprises into the field. Development is desired from within, as far as possible through the discretion of one governing body. It is held that this also is the rational procedure, by which industries will become systems of administration, and, as will be shown later, impediments on independent new enterprises have sometimes been imposed with legal authority.

It is Joint Stock which has made possible the evolution of great enterprises, and which has also made them powerful competitors, so that, it is said, an ever intenser incidence of risk is a fundamental cause of the combination method. But Joint Stock has also itself modified the risk element.

As long as an industry was in the hands of a large number of producers who were individual in the sense of finding their own capital, the competitive struggle, which destroyed a business, ruined individuals. There are modern instances of interference with this competitive result for this very reason, when an industry was still of that grade; for example, the remarkable scheme devised for the Greek currant trade, and known as the 'Retention'. As the ruin of individual small cultivators would otherwise have been the result, the Government organized a system of maintenance. But when the units of enterprise are joint-stock companies, liquidation does not imply ruin in the same way, because Joint Stock brought with it the method of distributed investment. In the case of failure, some people lose part of their capital; perhaps because some

other investment of their own has been unusually successful. The ramifications of interests can now become very great, and the question, what method of creating industrial control is most rational, has to take account of this, in conjunction with the fact that profit involves a risk premium, and that these are the understood conditions of investment. By the fact of distribution of investment, the industrial risks of capital are to be contrasted with those of labour, since wage-earners as a rule can work for only one business at a time.

The same considerations apply to the entrance of new competition. Enterprises entering the field are not now individuals staking everything on little-known chances, but may be directed by and largely composed of individuals who are in that same field already, and who know a good deal of its conditions.

In a second degree, these modifications of personal risk appear, through the practice, also rendered possible by Joint Stock, of company investment. While the individual may distribute his direct investment, his risks are spread again by the system of mutual company holdings, a company in which he invests having done this further spreading for him.

While, therefore, the Direction of an independent business does and must consider its shareholders as if they had no other investment interests, the intensity of risk in its final incidence is not fully represented by directors' statements. What applies to shareholders, also applies to directors as such. The 'spread' of directors' interests is a very remarkable fact.

As distinct, therefore, from the pure desire to rationalize, *that is, to organize industry in a systematic way under some* kind of unified control, it is not easy to assign its right place to the 'revulsion against risk', on which also the desire for combination has rested its case.

## V

The foregoing considerations show that there is something to be said for capitalist evolution in the alleviation of risks;

so that we cannot easily separate the risk element from the simple purpose of leadership and wide control. This desire for more extensive control is a feature merely of active enterprise and ambition; it has counterparts outside of industry. But as distinguished from, for instance, the tendency of public departments to expand when they can, the mixture of risk with ambition is a special industrial fact.

The same is true, in a less degree, when the risks in question arise out of bargaining, not out of competition. Great industrial influence may be gained by the control of enterprises on different levels of production, which were not, therefore, formerly competitive. This comes into being as the last stage of the bargaining process, which is made closer by long contracts, exclusive contracts, and agreements for exclusive trade. Finally, the bargainers combine. There is something to be said historically for the view that such combinations have been formed defensively, if it is thought that horizontal combination on one level is exacting too high a price from producers on another level. Thus horizontal combination leads to vertical, and the former becomes split by the engagements of its members to deliver their supplies, not to the market, but exclusively to some further producers. The latter do not get their supplies by this method 'at cost', but they get them free of the special combination profits on the earlier products. Thus a steel-works may buy up a coal-mine in order not to pay the profits of a coal combine. These are incidents of industrial friction. But the permanent or rational aspects of this policy are again not purely industrial; they are more generally administrative, while having this industrial application. It is natural for any great administration to consider the continuity of its relations with any supply on which it depends. Thus when a public department takes over the service of education, it does not rely on the market to find a supply of teachers properly adapted to its requirements; it sets about securing them by its own arrangements. Analogies can be drawn also from ecclesiastical and military administrations. It is, in fact,

difficult in many cases to say what is a single process, and how far unity of supervision must extend. Apart, therefore, from temporary or accidental causes, many administrations have to extend backwards or forwards from their main purpose, and in industry this is called vertical integration. In some industries the technical advantages are more obvious than in others; they appear to be greatest in the iron and steel trade. But broad considerations of administrative supervision may lead to its application in any case.

This form of combination, like the former one, may be undertaken for the simple purpose of leadership. But it creates this position only when the main administration is itself already so large as to give that position; and it does not by itself create monopolistic influence. When it is mixed with a large degree of horizontal control, it approximates to the third great type of aggregated interests—the Concern.

## VI

Industry cannot be looked at only as a type of government because of its special relation to risks; but some of its modern developments are to be explained in large measure by reference to administrative ideas not peculiar to industry, and especially to the motive for extended leadership and influence. When we consider the 'Concerns', we come to the case where technical economic reasons are least easy to assign. These have not the definite continuity of the other forms of control. They are of the nature of industrial aggregates or blocks. The interests which are thus grouped come within the control of one or a few single personalities who, because of the diversified nature of their influence, are rather magnates than leaders. Thus in the period of the German Concerns we had the Stinnes, Thyssen, Kloeckner, Haniel, and Stumm groups; and if, for instance, we examine the Stinnes group, we find that it includes iron and steel, special steel products, coal, electrical products, ship-building, shipping, chemicals, cables, aluminium, copper, automobiles, mineral oil, margarine, newspapers,

fisheries, and hotels, and this is not a complete list. These interests are obtained largely by the method of holdings of shares, and the interests of one group may, within the same large enterprise, touch those of another, the ramifications being so numerous that it becomes difficult to say where one set of interests begins and another ends. The concerns appeared in Germany in a time of great unsettlement, and their explanation—the sudden limitation of her resources by the Treaty, and the struggle to control what was left—is not a reason going back to economic considerations to the same degree as in the case of the other types. They do not appear to contribute to the solution of an economic problem, or to create a force of leadership for any permanent purpose of direction, and they cut across the lines of economic grouping. The Stinnes Concern broke down by complexity, and it appears that the remainder are being shaken out into parts which will adhere to one or other of the main lines of economic grouping and control. But grouping of this kind, on a lesser scale, is likely to continue, since it represents partly a type of ambition which is satisfied by variety of industrial interests, and partly the fundamental similarity of industrial finance, whatever kind of thing it is that is financed. It appears, from an official return, that 65 per cent. of the capital of companies in Germany in 1926 was still in Concerns.

## VII

If we look at the picture which is being drawn by these forms of grouping taken together, it is something of this nature. On different levels, combination takes place by agreements or consolidations, that is, Trusts or Cartels in the usual sense. Though the aim of Cartels is to prevent the elimination by failure of smaller or weaker producers, in fact they tend to create consolidations, because they allow stronger members to buy up weaker ones, and thus to obtain their share of the allotted output. As Cartellization extends, on each level there come to be predominant interests and decided leadership.

But cutting vertically across this are the combinations which terminate on a product in the higher stages, these combinations having considerable shares in the output of lower products in a succession of stages. Of these lower products they use what they require for their own finishing processes, and put the rest on the market at Cartel prices. A strong vertical combination may have leading influence as regards both its final and its lower products. And dispersed in a less systematic way over the whole field are the holdings which any large business has obtained in enterprises not closely related to any main purpose. All these interconnexions, made possible by the flexibility of the Joint-Stock system, and disturbing to the theory of economic competition and prices, suggest a few broad conclusions.

First, the *capacity* of either management or direction is more difficult to limit than that of technical industrial equipment. How broad, or deep, an area of enterprise can be singly managed is a question to which all this development is the only answer. And *a fortiori* of Direction. Examination of our own 'Directory of Directors' shows how widely this consultative responsibility can be extended, before reaching the limit of its capacity. One prominent personality has thirty-two directorships, thirteen of which are chairman's positions, and three managing directorships; some of the enterprises involved are among the largest of their kind; the range covers coal, railways, telegraphs, tea, asbestos, assurance, shipping, banking, general merchandise, canals. There are many cases where over a dozen of such important positions are singly held. These great extensions of control are to be related to the impulse to use the powers of management and direction at full capacity. On the other hand, a public department, with much greater routine, is supposed to be one man's job.

Second, the *authority* of business leaders will increase with the magnitude of their engagements. An example of this was the hurried endorsement of the proposals for international agreements between large interests, on the repeated plea that

we must not be 'afraid of big business'. This became, with marked rapidity, the right thing to say, and almost official sanction was given to recent conferences of business leaders simply because the interests represented, and the plans considered, were on the largest scale. Authority is always apt to be its own sanction, and in this case it claims that a measure of monopolistic power may be essential to a scheme of rationalization. Industry being a field of more special knowledge than politics, the difficulty is greater of applying criticism to leadership; that leadership itself is more concerned with working out the administrative methods of higher control than with the question of its democratic position. 'I do not consider', said one of the organizers of international industrial agreements, 'whether I may make these agreements; I go on and make them.' The relation of the community to this authority appears in the end to be determined by the expectation that scale of responsibility, and the labour of organization required for these great industrial structures, will tend to make leadership, in the words of the Balfour Committee, 'imaginative', and therefore considerate. It was in this expectation that the recent Committee on Selling Agencies in the coal trade reconciled the dilemma that what was necessary for high organization would create the possibility of monopoly. And so Liefmann says:

'When one considers what efforts have been made in many industries to obtain combination, to find its most purposeful form, to bring in the outsiders, to settle the differences; when he sees what time and trouble are applied, how many conferences held and rules drafted; and when he considers the earlier conditions where such common negotiation, making the inner details of management a matter of conference and publicity, would have been impossible, then he sees how the whole economic structure has changed, and how much the Cartels have revolutionized the whole basis of management and enterprise. . . . The sense of interdependence becomes stronger than the thought of economic opposition.'[1]

[1] *Kartelle und Trusts*, 1924 ed., p. 33.

This defines the difference between magnates and leaders, and the rationalization of authority.

Third, there will be the fact of mere *complexity*, whether modified or not by publicity. Industrial government permits of this in a degree not reached in the other great fields of administration, political, religious, and military. Its extent is shown, for instance, in the recent official German analysis of the cross-relations obtaining within and between the Trusts, Concerns, and Cartelled enterprises.[1] This maze of inter-connexions may become itself a matter of distrust and prejudice from the side of the community, especially but not exclusively in its international aspects. This prejudice showed itself at the outbreak of war in a well-known case, described as an 'octopus' of private interests; or in the name, a 'King of rats', applied to a control which has indefinitely extended underground accesses in all directions. Even if industrial finance is flexible enough not to feel anything unmanageable in this, the community, on occasions when such complexities are made public, is alarmed and disturbed, as if a march were being stolen on its market alternative, or joint-stock practice going beyond the spirit of the law. Sheer complexity of relationships might be one of the influences moving opinion as far beyond the sanction of private combination as it has recently moved toward it. Democracy likes at any rate to think that it understands how it is governed.

## VIII

With the growth of industrial leadership a change takes place in the relation of price determination to the dynamics of production. The change is one of emphasis, that is to say, of the degree to which prices are approximated to a cost of production. Under a strictly competitive economy, there are producers who are just able to come through the fluctuations of prices with an ordinary rate of profit, and these producers are in that sense marginal. There is an amount of production,

[1] *Einzelschriften zur Statistik des Deutschen Reichs*, Nr. 1, 1927.

not always in the hands of the same producers, which is extra-marginal, and of course another amount which is intra-marginal. The general conditions of supply and demand determine the price level about which the fluctuations take place, and therefore determine which producers are marginal. The extent to which extra-marginal, or high-cost, producers influence price depends on trade practice; it is less, the more production is 'to order', and they can keep their position only by working at lower than ordinary profit. In other words, prices are not usually determined by the costs of the highest-cost product, but the profit on that product is determined by the range through which prices have fluctuated over a period; and high-cost product has constantly to move to a lower-cost position, or go out of the market. The competitive equilibrium was not easy to define, but it depended chiefly on the output, and the elasticity of the output, of intra-marginal producers. It may be said generally that business administration was exercised on the problem of costs in relation to prices, which were the ruling fact, and which decided how much of the capacity of output was within, on, or over the lines of profitable production. It was always a mistake to argue, under these conditions, that there was a body of marginal producers who *determined* the price. So far as any producers did this, it was the largest, who were probably intra-marginal. All producers were, however, affected by the knowledge that, though expansions of their own output were possible and would be profitable if prices were affected by that alone, other producers would be competitively induced to do likewise, and so output was controlled by a sense of the market, which is a difficult thing to relate exactly to prices.

It is an aspect of 'rationalized' industry, on the other hand, that the price can be more properly regarded as the *instrument of an industrial administration.* It separates itself somewhat from relation to any particular cost, and takes priority over the output, the latter being adjusted so as to render a certain price policy possible. The leaders of a great combine

act under the conception of an industrial development which is frequently defined as the adaptation of the whole output to the possibility of certain prices.[1] This is seen in the details of the price policy of Cartels, where a margin exists between base prices and the 'accounting' prices at which the output is taken over from the members; and also in the use of 'guiding' prices in other cases. And thus the 'base' price, which was supposed to be related to a cost of production, has now been omitted from the contract of the Rhine-Westphalia Coal Syndicate. This instrumental use of prices is the result of the greater supervision which has been made possible by combination, and it causes the management to resemble an administration in which the methods of development are more capable of a general decision. If one looks at such great combines as exist in the tobacco or chemical industries, with their high degree of internal organization and their external agreements, the management of the price will be a compromise between the interests of consumers, those of the shareholders, the provision of reserves for development, and contingencies. An assignable cost of production is less easy to set off against that price. In a sense, this means monopolistic influence; but monopolistic policy would be something else, the *administrative* idea of price policy being worked with a larger factor of compromise. It may be described as the development policy in industry. The defence of 'rationalization' is just this difference between administrative and monopolistic prices, or at least the claim that there is such a difference.

This sort of purposeful adjustment is different in its conception of the enterpriser's function from that more risk-taking pursuit of the consumer which trusts to new uses, substitution, and the future compensation for falling prices. It does not bank much on the long run, or a high elasticity of demand. A workable price level being obtained, a tight rein

[1] 'Die Preise auf einem gewissem Niveau zu halten, diesem Niveau die Produktionsgrösse anzupassen' (Saitzew). 'Über die Preisbildung hinaus gibt das Kartell den Unternehmern Gelegenheit, die gesamte Absatzorganisation der Gewerbe zu regeln' (Liefmann).

is held over the pressure of output against it, and the price is 'managed' so as to give only gradually to this pressure. Price stability *so obtained* is taken as the index of industrial stability.[1] The level depends on the amount of administrative freedom which the combined producers have, and on the size of their coefficient of compromise. Thus parts of the 'contract curve', between average cost and monopoly price, correspond to positions of highest cost, 'dividend' prices (either when inflated capitalization is to be made rentable, or when the industry accepts for itself an exceptional standard), prices oriented by effective new competition (i.e. by the breaking-point of exclusive contracts), and prices oriented by the point of 'own-production' by large buyers. Given the factors of an established position—the authority of the combines—and of compromise, the purpose is to assimilate the industry to an administration.

The administrative use of prices may also extend beyond the consideration of what will maintain and develop productive capacity in a particular industry. It has been claimed that strongly led combines may adjust their prices so as to assist the stability of industrial development as a whole. Thus a combine might, on a rising market, so advance its prices as to render expansion more difficult, and therefore so as to damp down that expansion. There are very few cases in which it can be said that industrial combines have applied this idea. Indeed it is significant that it is always the same case that is quoted, and one that happened twenty-five years ago. It has been considered that this policy is applicable mainly from the side of the banks, which, it is suggested, should move the price of loans quickly and strongly enough to deter speculative inflations of business and reduce fluctuations. To keep other things more steady than they might otherwise have been, one thing, the price of money, would thus be less steady than

[1] Cf. Wiedenfeld, *Gewerbepolitik*, p. 146, and the B.E.A.M.A. Report on *Trusts and Combines in the Electrical Industry*, p. 21, for typical and almost identical statements.

otherwise. This policy is not inapplicable to industries which are as fundamental as banking—for instance, to the coal industry, on whose supplies expansion depends as vitally. It is, however, unlikely that any industry will have the same degree of combination for this purpose which the great banks have; and the relation of such a policy to their own costs is more complicated than it is in the case of money. Where price administration has been applied for this purpose, it has been in the form of price-stability, as in the case of the German Coal Cartel. It is natural that this simple method should be applied, and any one can fix a price, especially near the top of a boom, as was done in that case. It is, however, price adjustment that is required, a more difficult proceeding, and not expectable in respect of industrial administrations beyond the necessities of their own internal stability.

## IX

The idea of a rational administration, in its relation to the 'competitive war' and to the monopoly 'problem', may be otherwise illustrated. Liefmann, a great defender of rationalization by Cartels, states that 'a Cartel without monopolist purpose is nothing at all'. It is to him a matter of definition that some common administration is to be possible. This is the reaction which he describes from the overdone system of individualism, in which the consumer was well served, but at a concealed social cost. But it will be remembered that Cournot derived the competitive position from that of monopoly, by multiplying the monopolists. Historically, as well as analytically, it is conceivable that we might have worked downwards from monopolies, instead of upwards from competition, in order to obtain the position now called rational administration. We might equally explain the facts on the ground that the monopoly motive is fundamental, and that it expresses itself wherever or so far as competition does not impede it; or on the ground that competition is fundamental, and always tends to break down or circumvent monopolist tendencies. From the

former point of view, the more competition is unrestricted, the less is the influence of *organization*; working down from monopoly, as a unified organization, competition appears as the limiting case, when all the parts fly apart and act independently. The latter standpoint gives monopoly as the limiting case, and therefore *monopolistic tendency* as a description of less complete organization. The conditions now sought for under the name of rational control are between these limits of pre-assumption, and may therefore be regarded as a departure from whichever end of the scale is pre-assumed as 'natural', in the direction of the other 'extreme'. Those whose ideal is the completest regulation of an industry as a whole regard, therefore, the looser structure of the Cartel as not so completely rational as the Trust, as a lower *organization*; while the still persistent preference for competitive conditions regards the Trust as monopoly and the Cartel as monopolist tendency. Comparing the method of Cournot with that of Ricardo, the 'letting down' of organization with the 'building up' of monopoly, the idea of 'dissolution' with that of 'restriction', we see 'rationalization' as the endeavour to find the range between these limiting concepts of purposive leadership or industrial administration. Otherwise stated, there are restrictions on organization as well as on production. Dismissal of the rationalizing argument on the ground that it is 'another word for restriction' means that we are arguing under one of the pre-assumptions that which has historically had precedence since Adam Smith. The farther from Scylla, the nearer to Charybdis, and vice versa. The middle way is open to both dangers, and to the fears of those who have become specialists in rock or whirlpool navigation.

## X

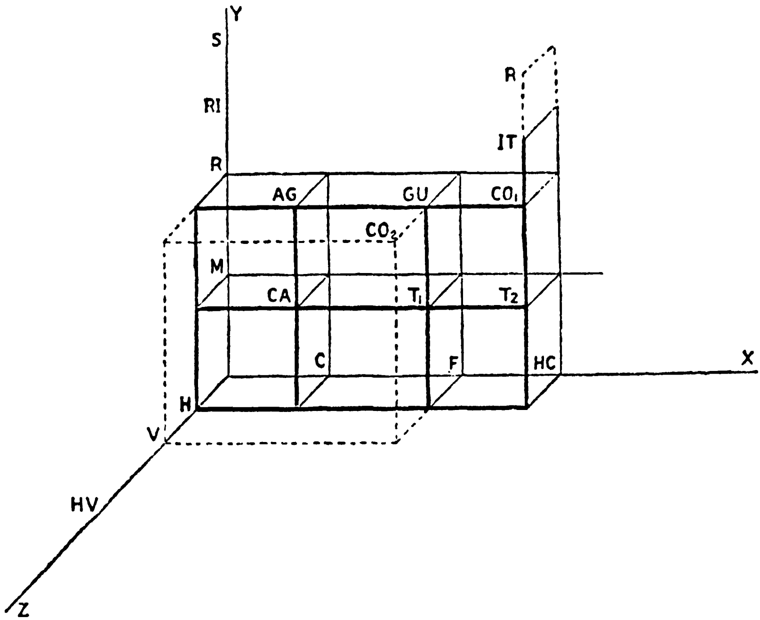
Reference may be made here to two recent contributions to the problem of extension of control, which in different ways place it in relation to the pre-assumption of independent competitive working.

It has been shown by Dr. Thorp[1] that there is a great variety in methods of industrial grouping, and that the 'power combines' indicate only the last stages of measures taken in a smaller degree to strengthen independent positions. He shows that most businesses are operated by a single establishment, only 7·4 per cent. of all establishments being in 'groups', though this means a very much larger proportion of the output. Besides those groups which he calls uniform, in which the grouped establishments are of the same kind, and are 'horizontal', and the vertical groups to which reference has been made above, he finds that producers defend themselves, on a small scale as well as on a large, by other forms of extension of control. There is grouping of convergent processes, when the same business makes complementary or auxiliary products—what may be called 'lateral integration'—so avoiding the risk that one product may be affected on the market by misfit to products used in connexion with it; e.g. bedsteads and mattresses may be grouped for production. And there is divergent grouping when different products are made under one direction, because of a fundamental common material or process; e.g. because of common process, wire and hempen ropes are sometimes produced together. These four types of grouping show themselves in most cases on a small scale, and are the origins of what, in the largest cases, is called the 'rationalization' movement. In over 60 per cent. of all the groups examined there were not more than two establishments; in 4·5 per cent. of groups there were more than ten. The 'span' of these groups—the extreme distance between their establishments in the same country—may also be an indication of the economic power involved; it was over five hundred miles in 17 per cent. of all the groups. Thus the desire for extended control arises out of small cases, as a 'rational' device on various grounds, though its theory and title have been examined only in its largest extensions.[2]

[1] *The Integration of Industrial Operation* (Washington, 1924).

[2] Cf. *Operating Combinations in Canadian Industry*, by V. W. Bladen,

An attempt has been made by Dr. Saitzew, of Zürich, to place the 'rational' development in a true perspective as regards both motive and structure, in a recent paper.[1] He uses the method of co-ordinates, placing along three axes points defining differences of *motive*, *instrument*, and *direction*




of grouping. Thus the motive may be pure monopoly, or rational control, or avoidance of risk, or secret influence; the instrument may be contract, fusion, or holding company; the direction may be vertical, horizontal or a mixture of these. It is thus possible to place in relation to each other the chief types of structure, and to classify on lines different from those of Dr. Thorp. Part of this classification is shown in the diagram, the instruments of Contract, Fusion, and Holdings being placed on the $X$-axis; the directions, Horizontal or

in the *American Economic Review* for September 1927, for an amplification of Dr. Thorp's monograph.

[1] *Horizontal und Vertikal im Wandel der letzten Jahrzehnte* (Jena, 1927).

Vertical, on the *Z*-axis; and the motives, Monopoly, Rationalization, Avoidance of Risk, Secrecy, and so forth, on the *Y*-axis. On the monopoly level of motive there are Trusts ($T_1$ and $T_2$) and Cartels (*CA*); on that of rationalization there are the 'organized association' (Arbeitsgemeinschaft, *AG*), the 'great undertaking' (*GU*), and one type of Concern ($CO_1$). It is an exercise in ingenuity to fill in other types. The combination *HC*, *H*, *RI* gives the Investment Trust (*IT*); the secrecy motive *S* yields one of the 'Kings of rats' (*R*). There are various other forms of Concern. Dr. Saitzew has by this means done something to rationalize the argument itself. His method indicates the range of organizations, which is neither all 'monopolist' nor all 'rational'.

## XI

In the policy of rational industrial administration, as it is usually presented, restriction is involved, on the ground of the attempt to adapt production to a proper rate, to overcome duplication, overlap, or speculation, and to give control through leadership. There are some important cases where this policy is carried out under public auspices, and these involve an admission of necessary organized action, to which private enterprise on similar lines may appeal for a general sanction. Instances are the Brazilian plan for the valorization of coffee, that is, the adjustment of sales under the instrumental use of prices; the British rubber scheme; the Greek 'Retention' in the currant trade; and the German control of potash. The last two of these may be specially noticed, as important cases of the refusal to let competition work itself out, but with some difference in the fundamental conditions.

The Greek Retention arose out of the fact that the currant crop is of vital importance in the export trade, and is grown by small producers. When the French vineyards were ravaged by the phylloxera after 1879, Greece supplied the deficiency, so that the currant was described as the 'saviour' of the wine

industry. There was a great extension of plantation in Greece, the peasants being advanced loans by the State, and great prosperity till about 1890. Then France, having repaired her vineyards, killed the trade with heavy duties. There was so little elasticity in the 'pudding' demand of England, that prices fell ruinously and did not cover freights. The peasants were faced with ruin, and the Government with revolution in the Morea. It was therefore decreed that a percentage of the crop was not to be exported but retained at home, and this percentage had risen by stages to more than 50. At first the Government, afterwards a Privileged Company, received this 'Retention', to be disposed of at home by finding some new use for it, as currants were not consumed in Greece itself. The complicated arrangements would require a long statement, but they amounted to 'home dumping' on industries which extracted alcohol, or on the Greek wine trade, at prices far below the export prices. Heavy taxes were laid on new plantations, and funds were raised by the Company to compensate cultivators of plantations given up. All this was done against the opposition of those who contended that the whole idea was wrong, and that natural laws should work themselves out. The Privileged Company, getting a share of the crop for nothing, was so successful that it was bought up in 1924, and the problem took a new phase. But it shows the following features. The control was considered specially necessary because the units of enterprise were individual peasants faced with ruin. The organization yielded, for a long time at least, a solution, because organized effort was able to create conditions which would not otherwise have been possible. The new competitor was restrained by taxes, and the elimination of surplus production was obtained by financial measures of compensation. But for a long time such ideas and methods made the Retention rather a curiosity for economic thought than anything else.

The significance of the Potash Cartel is different in so far as the members were not individuals faced with ruin by competi-

tion, but companies. But it shows, under government sanction, the working of the ideas of rationalization in an unusual way. There had been a Cartel since 1879, but investment in this industry increased very rapidly, perhaps because of the Cartel, but also because of the agricultural demand. A great speculative period, the 'Kali fever', broke out in 1898, the Prussian fiscus itself bought (according to Liefmann) an important works in 1906 for fifteen times the paid-up capital, and under such conditions there was immense over-capitalization and excessive investment. In this, as in the Greek case, many persons advanced the view that the natural economic solution would in the end be the best; and in 1910 the larger producers, suffering from reduced quotas in the Cartel and consequent high prices, broke away and sold ahead to America at half the current prices. The Government considered the position dangerous to German agricultural interests. In 1910 a law was passed under which total production, quotas, exports, exchange of quotas, and prices were regulated. This law did not establish a compulsory syndicate or create a monopoly, but in effect it made adherence to the Cartel necessary. The important rationalizing feature was that new competition could not arise except on disadvantageous terms, the output of such works being by the law subject to special limitation for a number of years. In 1919, as the result of War conditions, the number of producers had increased to 200 (having been 68 in 1910); and the prospects were so serious that compulsion was applied by a new law of 1919. All producers were now compelled to join the Syndicate, which became the executive organ of the Federal Potash Council, with which, and its organs, final supervision lay as to prices and policy.

The special application of rationalization under these auspices is in respect of closing down, and of the growth within the Cartel of the largest interests. Closing down could take place voluntarily or compulsorily. It was decreed in 1921 that owners who declared by a date in 1923 (later extended to 1925)

their willingness to close down and keep closed till 1953, were to retain their quotas; that is, they would receive their proportion of profits exactly as if they had delivered their supplies. Compulsory closing down is based on 'proved permanent uneconomical working', the compensation being similar, but on reduced quotas. At the end of 1925, out of 224 shafts in existence, 118 had been definitely closed till 1953; 71 were at work, and 35 held in reserve. The shafts closed down represented 441 of the 1,000 quotas of the Syndicate. Within the Syndicate, combination by exchangeable quotas, a main method of rationalization under Cartels, has given a dominating position to two large groups.

It is unnecessary to comment further than to say that to carry on prices 44 per cent. of idle capacity was a proposition only possible because of Germany's virtual monopoly of this product. The case against 'Ricardian rationalization' was not a strong one. Private enterprise makes too great a claim on public policy by defining as rationalization schemes of this extreme type. Rationalization will often be occasioned by bad conditions, but it is, properly understood, a futurist idea. This case was a bad public sanction for retrospective claims, a type which is likely to recur.

## XII

It was pointed out earlier in this paper that the whole question was thrust on public notice by the recent argument on the international extension of grouped control, bringing strongly into prominence the influence of industrial leaders in their own countries. They had obtained a leadership which enabled them to speak for their own nations in these arrangements. This authority, derived also from the impressive magnitude of the international plans, imposed on public opinion nearly everywhere an attitude of assent, so that in a sense these leaders 'got away with it' in their claims for rationalization by Big Business. But whatever may be thought of the system of grouping and leadership on a national basis

would not necessarily apply internationally. A community may accept the evolution of competition into a type of industrial administration, relying always on the foreign market for limitation of monopolistic policy. When this guarantee is endangered, it may go back on its assent to national combination *under purely private leadership*.

For example, it is a usual form of international agreement to 'respect home markets', and this in effect creates prohibitions on trade which are greater than the considered fiscal policy of the country was prepared to allow. It is argued that tariffs thus become 'superfluous', a designing expression which can scarcely have deceived the distinguished writers who have used it. The suggestion to rationalize international production by giving to private interests a treaty power overriding that of the governments concerned, compels us to consider in what form such international relations are compatible with any system of domestic combination.

There is, of course, a wide spread of what may be called 'direct international capitalism', through the creation of foreign branches and shareholdings. These do not create the problem just referred to, which only arises out of *agreements* to restrict output or markets, and so endangers locally the conditions of the consumer.

A distinction may be introduced here between two types of agreement with the aim of rationalization. There are those which are called 'agreements for conditions', and those which are more directly regulative of volume of output and sale. Examples of the former are given by agreements on length of credits, or for standardization of types, or against rebates on price. But perhaps the most notable instance is that rationalization of the conditions of competition which is known in the United States as a 'trade practice submittal'. If there is any practice which may be considered unfair—as in the case where various wares were marked 'Sheffield steel' though produced anywhere—the firms in the industry may be called together to a voluntary conference by the Federal Trade Commission,

and an expression of opinion obtained, which practically establishes a law-merchant for the industry. This is an agreement on conditions of trading, with no other limitation on competition, and there may be scope for international agreements of this nature to which no exception could be taken. Thus an agreement against dumping might be negotiated, to overcome the 'falsification of the market' and the instabilities which dumping creates; or an agreement for the exchange of patents, or for the organization of trade information.

It would seem that acceptance of the claims of combines to rationalize within national limits would be easier if on the international level intercombine agreements were of this type of 'Cartels of Conditions'. Otherwise, instead of international agreements leading *a fortiori* to the justification of national combines, they are likely to diminish the consent to,or increase the legal supervision over, them. The chief instability of the present position lies not in the formation of international agreements of the recent type, for these have existed for over twenty-five years, but in the realization in the last few years of possible undemocratic extensions of industrial authority and leadership.

## XIII

So far, the ideas of rationalization and leadership in industry have taken account only of relations between producers, as the heads of organized units of enterprise. But the membership of an industry includes the great body of workers who are subject to this leadership, and it remains to show the bearings of the argument for 'rationalization' upon them.

As a defence of the Cartel system in this respect, it has been argued by Liefmann that the dangers of 'instrumental' price policy to the position of wage-earners as consumers are continually being lessened by the growing participation of labour in prices, through its own combination. It has an increasing producers' interest. Or otherwise, the same argument has been put by one great industrial leader, who states that there is

practically no pure consumers' interest except that of the *rentiers*, and these are not to be too seriously considered against plans for a more rational organization of industry. It is, however, too summary to dismiss the labour question involved in this way. Even if we consider labour under the broad general name of producers, it is obvious that there is a degree of restriction which will affect them all without compensation, there being fewer goods for the whole wage-bill to buy. And if we allow for the diversity of kinds of producers, it is also evident that Group A may penalize Group B, and conversely, and that it will be difficult to follow the incidence of various group restrictions, though easy to show that there may be a great spread of injurious reaction. The post-war wage position in this country is largely due to such reactions between groups. A general defence in these terms of the restrictive aspect of rationalization policy is open to Yves-Guyot's pertinent question—*Qui restreindra la restriction ?* Against the debit of producers' restriction it is not a set-off to credit labour combination, since the right way of distributing the product, and the right rate of production, are independent questions. So far as rationalization implies restriction, it has to commend itself to the working-class community for reasons against which existing rights of bargaining are not offset or debited.

The aspect of rationalization in which labour is interested *as a further advance* is that of control. By this is meant the sharing of administrative industrial control by labour as such. There are various methods by which shareholding may be extended to employees, but in the cases where such holdings give a share in administrative control they imply that the labour qualification is not itself adequate, and that employees must qualify as capitalists. Co-partnership schemes have their own place in schemes of industrial progress; but the question is different, how far on the basis of work alone it is rational to distribute shares in control.

The existence of organized wage-bargaining is not a solution of this question, because it relates mainly to the terms on

which labour is sold or delivered. The terms of delivery—that is, the conditions of work—are pushed up to a margin called by Mr. Goodrich the 'frontier of control'; but this, while it compels the management to make some internal arrangements concerning employment, is at its utmost rather to be compared with terms of sale and delivery of products between their consumers and producers, the sellers not thereby entering into the buyers' administration of their own concerns. This has nowhere been more clearly put than in the first clause of the Engineers' Agreement, which stated that 'the employers shall not interfere with the proper functions of the Trade Unions, and the Trade Unions shall not interfere with the employers in the management of their business'. This was called the 'General Principles of Employment'. It implied two administrations, related as buyer and seller of a service.

The difficulty of overcoming this dualism within the individual business is that of obtaining any equation between units of labour and capital. The idea of a franchise implies a basis of qualification, and in this case a rule for equating a certain amount of labour of a certain grade to a certain holding of capital. This is the point taken by the exponents of the New Zealand Companies Empowering Act of 1924. By that Act it is possible to issue 'Labour shares', entitling the holders to full voting powers, but Companies have themselves to decide what is the right distribution of these shares in relation to those of the holders of capital. It is very difficult to see a basis of general application.[1]

It should be pointed out, however, that the idea of control by some kind of industrial franchise is one carried over from politics to industry, and that industry is not alone in not having hitherto applied it. Such other fields of administration as the Army and the historic Churches do not proceed on this method either. The conditions are not regarded as being such as to place these spheres *in pari materia* with politics as to their

[1] I have been able to obtain information of only two cases of the application of this Act.

fundamental principles of control. Many criticisms of industrial structure in this respect come from sources where authority is a much more marked feature of administration than it is in industry.

Difficulties of this kind arise mainly when the question is of a share in the control of individual business. A solution within that sphere may be found in time along the path first broken by the New Zealand Act. Meanwhile, however, the process of industrial grouping for the purposes of technical rationalization does itself tend to make possible a degree of rationalization as labour understands it. For it creates units of enterprise which are on the same scale as labour organization, that is, which extend over a large part of an industry. Trade unions have been suspicious of attachments of labour to capitalist government within individual businesses, but these objections, it may be suggested, would not be so serious against the representation of organized labour on the government of great combines. The fact that scale of working corresponded to size of organization on both sides, besides removing the labour objections to sectionalism, might also shift the problem of qualification from an individual to a mass basis, the participation in control being that of representatives, and settled on some broader view of rights of government. It is a feature of the most organized syndicates in Germany that this participation in the general control has been obtained for labour representatives. The horizontal combines, rather than the Concerns, are obviously the most favourable sphere in which to proceed for this purpose. It is to be admitted that the problem of qualification, while simplified, is not solved. For purposes of bargaining the rule is equal representation, whatever the relative importance of the parties. The problem of shares in government has no theoretical solution. Great combines make a settlement more possible, and also more urgent. Some great fundamental industry, combined either voluntarily or, as in Germany, by law, might develop a solution by the method of trial and amendment.

Again, rationalization by industrial grouping and leadership may enable a further step to be taken in respect of industrial peace. Our present resources for this purpose, on a voluntary basis, are very complete; but if there is a gap, it is in respect of a method of assuring continuance of work while negotiations proceed. The coal subsidy was of this nature on an unusual scale. In respect of wage disputes in fundamental industries, it seems to be a possible addition to our methods that, when negotiations have narrowed the issue to its smallest difference, and there is yet no agreement, the disaster of stoppage might be averted if the trade union could be enabled, pending an arbitration, to advance to its members the whole or a part of the difference in question, subject to guarantee of being refunded as much of its claim as the award sustained. This might be called the method of 'continuation pay'. It would always be less than strike pay, since the latter is about two-fifths of wages, while the difference in dispute would not often be as much as half of that. The union would therefore suffer less even if the award went entirely against it. There is some approximation to this method in the occasional practice of antedating awards, but the community is not thereby cleared from the loss of a stoppage. If a step of a new kind can be taken, it is by way of making 'continuation pay' a practicable thing. Now the higher organization of industry does contribute to its practicability, since it enables a more complete guarantee to be offered from the side of employers. It may therefore contribute to a 'rationalization' of industrial relationships which would be of great benefit to the community, the more so if some working solution of representative control had also been applied.

Finally, we must not bar the possibility that such methods of advance and recovery may also add to our resources for dealing with unemployment. Suggestions have been made to assist employers in times of serious depression by aids to wages, instead of employing funds in payment to idle workers. The checks which would make such a proposal at all feasible

become more worthy of consideration if the State is dealing with great associations of producers, capable of giving guarantees of future repayment, in whole or part, and having an inclusive accounting system. At present, this possibility can be no more than mentioned.

# VI

## RATIONALIZATION AND THE COAL TRADE

[Some of the matters discussed earlier are illustrated by the reorganization of the British Coal Industry, in comparison with the German Cartel at the same date (1930). The most important contrasts are in respect of the inclusion of other than producers' interests *within* the system, and the effect on restraint of trade in industries not publicly regulated.]

A NUMBER of the ideas which have been discussed may be brought together in a particular case of the public reorganization of private enterprise, the British Coal Industry. The Act of 1930 was preceded by two Royal Commissions, which met under very different conditions. The Sankey Commission was much concerned with the profit motive, and the share of labour in control. But the Act of 1920 only allowed for a form of consultative control, which proved abortive. The Samuel Commission found that the profit motive had turned into the problem of profitability. Both had to review the organization of the industry, but came to different conclusions on the issue between public and private administration. The reason for intervention was policy, the industry being fundamental in our economy. The solution in the Act of 1930 appears to have come by the sanction of international comparison. In its post-war phase, the German Coal Cartel did offer a new model of rationalized private enterprise. The purpose of this Essay is to compare that model with the copy, since we desire to know how completely a regulated private industry has sought to allow for motive and interest, as well as economy and fairness of operation. In regard to what has been argued concerning trade practice, it is also relevant to consider how we are affected, as compared with Germany, by the assumption of public responsibility for forms of restraint of trade.

The Sankey Commission debated in its evidence, especially that of Sir Richard Redmayne, the issue between what one

side implied to be the Giant Sloth of nationalization, and what were called by the other side the 'Black Tigers' of capitalist combinations. Even if the tigers were to have their claws cut, as Redmayne thought possible, by the provision of controls over producers' amalgamations or associations, the debate went against this solution, and even against the Duckham scheme for controlling the profits of large producers' unions. It was the opinion of Redmayne that the German Cartel had worked successfully; but two members of the Government responsible for the Bill of 1929 took in 1920 the 'black tiger' view of such schemes. The change in view is the more remarkable as a 'clause to cut claws' appears in the Act only to the extent that the Cartel schemes must be approved by the Board of Trade, which could also dissolve them on complaint. But the Board had to approve schemes whose content was the organized regulation of output on the Cartel plan.

The proposals of the Act appear to have been occasioned by the Report of the Committee on Co-operative Selling in Coal, presented in 1926. This Committee took a wide view of what such co-operation implied, and was evidently impressed by the operation of the Westphalian Cartel, which, in its view, 'from its inception in 1893, has served the Ruhr coal industry well. . . . Under its regime, coal-mining in the Ruhr and the coal export trade have developed rapidly and fairly evenly. Inland prices have been steadied against the effect of trade booms and slumps, and more regular working of the mines has been secured. . . . The development of the industry has been regulated to its own advantage, and generally speaking to the benefit of German industry.' The elements of instability in the system were, in the Committee's view, removed by the legislation of 1919, which made the Cartel system compulsory, thus doing away with outsiders, and the fighting policies which their presence occasioned. The Committee went still farther, and argued that in this country 'industries which already have such organizations, and monopolistic combines generally, have shown sufficient commercial vision to main-

tain a reasonable balance between the selling prices which it is in their power to charge and the selling prices which they actually do charge.... There are worse evils than a monopoly.' When district organizations were in mutual competition the danger was still less to be feared. And, to speak generally, they held that combination was at any rate a policy, where otherwise there was none. They thought that the law on restraint of trade should be cleared up, so as to remove uncertainty in the status of such combines; and of course this is required in greater degree when the standard Cartel methods are compulsorily enacted.

In view of the findings of the Committee on Trusts of 1919, the special inquiries under the Profiteering Act, about twenty in number, and other important unofficial inquiries since the War, this conclusion was remarkable. To take only one instance, a Joint Inquiry into foreign competition and conditions in the Shipbuilding industry reported in 1926 that 'in view of the extent to which high prices of materials are prejudicing the total costs of shipbuilding, we agree to ask the Board of Trade to investigate the operations of rings and price-fixing associations in the supply of these materials, with a view to bringing relief to shipbuilding'. The Selling Agencies Committee did not consider the rationalization of competition by anything short of the full Cartel method. In America, where this method was illegal, the result had been to cause producers to develop the Trade Association to its fullest extent, so that, partly by private arrangement, partly with the assistance of the Federal Trade Commission, a sort of law merchant or code of competitive regulation had been created in many industries.[1] Everything which mutuality, in the form of publicity between competitors, can do is thrown into the balance against risk, so that the Trade Association has become a new factor in the argument. But the Coal Committee went straight for the stronger organization as exemplified

[1] *Report of the National Industrial Conference Board on Trade Associations*, New York, 1923.

in Westphalia, and appended an account of the Cartel. This appears to be the origin of the Bill of 1929, whose bare outlines were similar to the later German development of central and local Cartels under public compulsion and supervision.

On the other hand, the occasion for a particular regulative proposal is not the cause of the industry having been due for regulation in the public interest. The particular phase at the time of the Sankey Commission was the relation of labour to control; later, it was the earning power of the industry as a whole. But behind these phases there may be simply the fact that coal is fundamental to national economy and to our foreign trade, and has unusual political influence, and has 'ripened' to the point of a national regulation. In that case, legislation occasioned by a particular phase has still to take account of all the causes of trouble; whereas the Coal Act appears to have forgotten the problems of 1920, and to be legislating for only one thing, though the ideas of 1920 are more valid in the compulsory organization now enacted than they were as part of the settlement in the Act of that year. The German Coal Law, which was also the substitute for complete nationalization, aimed at allowing for all the issues, not of economic prices only, but of the relations of the various interests in the internal control.

There is one important respect in which this scheme—as well as others more recently enacted in Agriculture—is related to general industrial conditions so as to cause some question. A public Department is made finally responsible for the approval of the schemes of district and central Cartels. The Committee on Selling Agencies appears to have realized that the law of restraint of trade would require reconsideration. We have only the Common Law, which has reached, through about a dozen leading cases, the position that agreements in restraint of trade are not illegal, if they are 'reasonable as between the parties', but that they cannot be enforced *in invitum*. There is a vaguer margin of reference to the public

interest, to which it is at one time said that the law 'looks jealously', while in another decision it is held that 'the onus of showing that any contract is calculated to produce a monopoly or enhance prices to an unreasonable extent will lie on the party alleging it, and, if once the Court is satisfied that the restraint is reasonable as between the parties, this onus will be no light one'. In yet other cases it is pointed out that the Common Law cannot be expected to keep up with Political Economy, or to argue on economic consequences. In these doubtful conditions, the existence of a law enforcing Cartel policy with organized restriction of output must, it would seem, increase these tendencies of the Common Law to which criticism was directed in the Macdonell memorandum of the Committee on Trusts, and to cause legal action to be even less frequent or effective against the unascertained amount of restraint of trade which is discussed in many recent findings. The chief result of these discussions has been the suggestion that the Board of Trade should have the right to obtain information, conduct inquiry, and lay the conclusions before some sort of tribunal. But if, in the most fundamental of our industries, the Ministry is responsible for agreements, to which all producers must adhere, and which must include the quota system of adjusting output, its position as an investigating and reporting authority is liable to be prejudiced for the purpose of a general control over industrial combinations. In other words, a more definite general policy is required, to prevent this special policy from having harmful reactions. In Germany the position is different, because all Cartels are subject to a special tribunal, from whose jurisdiction the coal industry is withdrawn for special regulation. There, also, the Coal Cartel had been at work for thirty years, and could not, in a time of great unsettlement, be allowed to break down. It is a different thing, in the present condition of our law and our discussions on monopolist bodies, to better the status of private restraint of trade.

This is perhaps a good reason for proceeding first by creating

amalgamations. It is American policy to allow this, subject to control of misuse of economic power in the stifling of competition, and to prevent large enterprises from making restrictive agreements. In this country the organization may come out to the same result by whichever method we start. Amalgamations prepare the way for Cartel agreements; history shows that Cartels with movable quotas tend to create fusions of interests. We may never proceed to deal with monopolist questions at all, relying on low tariffs, but it is repeatedly suggested that we ought to, especially if they are strong enough to over-reach public fiscal policy by private international agreements. Perhaps monopolist legislation is mostly fuss, and the Common Law is good enough, and we have to rationalize. But this is not what any inquiry into the matter has concluded, and in going about rationalization it is better to be free afterwards to deal with restraint of trade, especially in coal. For that purpose we are better placed in creating amalgamations, whose future agreements can then be considered, than in allowing them to develop within the ambit of the restriction system. The Cartel has always been the quickest way out of a difficult situation, but a later phase of rationalization may have something to do with the proper expansion of output.

The priority of amalgamation is also said to have the advantage of preventing the vested interest of the quota and sales at inflated values. There is not much in this, because, if the industry is going to be placed on a better earning basis, whether by amalgamations alone, or by amalgamations concurrent with a Cartel, it is impossible to avoid that expectation entering into the valuations of mines. Either quotas or capitalizations would have to take account of that, and in that light a fair quota is as possible a proposition as a fair capitalization.

To turn now to the nature of the Cartel scheme which was set up. It was only the outline of the German system which was borrowed—the administration of local Cartels, with a central Cartel and a resort to public intervention in reserve.

These Cartels were to be purely owners' administrations. The control of the consumers' and workers' representatives was to come from outside the administrative system, by a parallel system of investigating committees. Any complaint, and therefore a complaint about prices, could by this method reach the Board of Trade. There had to be some system of arbitration as between owners. A number of details were not filled in, such as the exact relation of the central Council to the local Boards. But a great deal was notably omitted in the Bill, which belongs to what in Germany is considered to be an adequate substitute for nationalization, in the way of including within a single system of interlocked administration all the interests which may claim to be represented in the public regulation of an industry. In what follows, an authoritative commentary on the German Coal Law of 1919 is used to show this contrast.

The Coal Council has to issue rules for the industry in the interest of producers, consumers, and the nation, and it is representative of all these interests. Half its sixty members represent employers and employed in coal-mines, in equal parts; and the rest are representative of the coal-using industries, the traders, the small consumers, the States, and other various interests. Its responsibility is shown by the admission of its members *durch handschlag*. It issues both general and particular orders to the administrative bodies, approves their constitution, and is the last place of appeal for complaints against regulations in a local Cartel or in the Coal Union. It has a complete right to obtain information from any branch of the trade, with due regard to technical secrecy. It can regulate the amount of import and export. It has now obtained a modification of the original law, which gives it a control over prices not at first conceded to it; its chief Committee can participate in the price deliberations of the Coal Union, and no price can be fixed if a majority of that Committee does not concur. Of course, it has nothing to do with wages. The representatives of employees, consumers, and

officials on the Coal Union and the local Cartels are chosen from lists drawn up by the corresponding sections of its members. It can, in fact, do everything except carry on the industry itself, for it has not legal personality. Its costs are borne by the Coal Union. The Minister for Economic Affairs has the right to be represented at all its meetings, and can prevent it from acting unconstitutionally, but he cannot dissolve it. There are monetary penalties for disregard of its orders.

The Coal Union is simply a Cartel chosen out of the local Cartels, with representation on an output basis. It has to administer the industry within the rules of the Council, and to supervise the local conditions of sale and delivery. But it is not merely a producers' Cartel. Its supervisory body must include three employees' representatives, one representative of consumers, and one of the technical staff. Among its main administrative functions are detailed regulations for the uniformity of price discounts and terms of delivery, for own consumption by mixed undertakings, and for the points of delivery to which wholesale prices refer. In practice, it is the price-fixing body for all the districts of Germany. And it is the first place of appeal by members of Cartels against the Cartel administration of the quota system and particular exemptions. From its own rules on these matters, either Cartels or their members may appeal to the Coal Council, while minorities of its members may also appeal to the Council against the making of its rules. Resort to the ordinary Courts is forbidden.

The inclusiveness of the appeal system, and of interests in the government, is continued down to the local Cartels. Consumers have their control over prices on the Union, but the Cartels must admit to both their managing and supervising bodies representatives of employees. This supplements on the whole Cartel the Works Councils Act for individual concerns. But in the management and supervision of the Cartel, the employees' representatives sit with full powers and, since

wage regulation is outside this system, they are supposed to regard their nomination as carrying a responsibility for the whole industry, not for any section of it.

This tripartite system is finally tied together by the powers of the Minister, who can require information from all organizations and persons in the industry, and who has the right to be represented at all meetings of the Council, the Union, and the Cartels. His representative can hold up any decisions which exceed legal powers or endanger the common good. He has himself the final word on prices, and on the rules for import and export which are made by the Council.

In view of the simplicity of the proposals for price regulation in the English Act, it may be of interest to set out the whole apparatus of price control in Germany, which is extremely far-reaching. Each Cartel discusses its prices in full meeting, amalgamation having reduced the membership to numbers suitable for such discussion. Voting being by output, the first control is that the stronger concerns have, in the Ruhr Cartel at any rate, usually preferred business to large restrictions at high prices; this depends on the fact that the quota is not only a right but an obligation to deliver, and can be revised. Of course, this protection of the consumer is only a relative one, since, when the quota system has operated for a long time, and prices are manipulated with a view to stability, a conjuncture is created to which the Cartels are adapted because they have created it, and it becomes difficult to say that the prices correspond to full possibilities of demand. The Minister's representative appears also to have a right to delay excessive price proposals on Cartels. Again, the working of the sales system gives each member of the Cartel an interest in all the prices, not only in his own. With the exception of quite local sales, all home sales are made through the Cartel for account of each member, and he is credited with the accounting price. But he is debited with a tonnage levy, not only for the expenses of the selling agency, but also for all losses on home sales incurred by that agency. If any prices are too high, that will come back

on sellers generally, and on that ground adjustments are made on a monthly basis of reckoning, within the maxima fixed by the Coal Union.

Prices are proposed to the Coal Union by the separate Cartels. It is in practice the Union which fixes them as maxima and announces them. It does not usually have to exercise a co-ordinating function, because the proposals sent up to it have already taken account of the competitive relations within Germany of the Cartels. The Coal Union does not exercise its right to fix sales areas or quotas for the Cartels. Prices are fixed by the Union as at certain points of delivery—works, transfer points, or storage points—though to get coal to these points any Cartel may bear any loss it likes; from these points freight charges must be added. To prevent excessive handling charges by dealers, both the Council and the Union are bound to declare the conditions under which a consumer who buys a wagon-load of 15 tons at a time can obtain it direct from wholesale points of supply. As this obviously applies to co-operative societies, and as the law requires that such societies shall be treated on the same basis as other traders, any one who believes handling charges to be excessive will escape from them by joining a co-operative body, though he has also his own remedy if his purchases are large enough. The wholesale price decisions are subject on the Union to control by representatives of consumers and the Minister, and by the intervention of the Committee of the Coal Council in price decisions. This is not the end of the question, because the Minister can exercise his own control in more than one way. The German States are represented on the Committee of the Reichsrat on Trade and Commerce, and can there draw the attention of the Minister to the level of coal prices. Or in his official capacity, through his representatives at meetings, he can delay price changes; or on his own initiative reduce them. In any case he has to hear what the Union and Council have to say. It is not to be supposed that all this system is always at work; the Coal Union practically sets the prices,

knowing what the control is. A maximum fine of 100,000 marks can be imposed for exceeding the fixed prices.

The retail trade is also regulated. Communities of 10,000 inhabitants, or groups of communities, have the right to set up agencies in their areas, and to fix retail prices, for exceeding which penalties can be exacted; a right which lapses if the Minister uses the powers given to him to set up district offices for the same purpose, or if the States, with his consent, do so.

Besides the level of prices, there is a certain control over their uniformity. For example, the Coal Council is expressly empowered to compel buyers whose demand is irregular to take or increase their supplies in the summer months, when trade is otherwise slack. The price proposals made by the Ruhr Syndicate, whose influence is predominant, have always been ostensibly based on the idea that the conjuncture was thereby to be controlled and not merely followed; and the facts show that its prices had for twenty years varied much less than English prices. It did not put them up so fast, and it held them up when the market was falling. The instrumental use of the price of a fundamental requisite of production is, however, not so simple as this. In this country the function has usually been ascribed to the price of money. But the control of the conjuncture in this way implies at least the threat that this price shall go up ahead of the rise of other prices; and to keep the price of coal down in these conditions does not obviously control a boom. The transfer of this function to the price of a commodity may, however, be effective if, with a moderate rise of price, long contracts are enforced. Price uniformity is also sought to be obtained by the power of the Coal Council to order a change in the percentage of output which mixed works can retain for their own consumption; in time of scarcity this may be reduced, so that more coal is marketed by the Cartel. This, however, only affects the channels of supply; the demand of the mixed works remains, though they buy more from the Cartel. Finally, as between consumers, the right of own consumption does not necessarily

create the difference usually ascribed to it as a merit, in encouraging the integration of businesses, by giving them coal at cost. Any one who buys a mine in a Cartel can only do so on terms which capitalize the advantages of that position.

The foreign trade in coal is subject in Germany to rules of the Coal Council, which can impose limitations, the Coal Union being competent to discuss the question and make proposals to the Council. Limitations of import must have the approval of the Minister. As regards export policy and prices, this appears now to work through the provision that the Council has to approve the rules of the Cartels, the rule in the Ruhr Cartel being a division of the quota into two parts, of which one may be sold abroad. Producers may sell to that extent freely abroad, or they may sell abroad through their Cartel; there is some competition abroad with the Cartel by its members, though the Cartel has a priority claim on certain large dealers.

This system is not given as an example to follow in all its aspects, but rather as showing what has been the development of compulsory Cartels, when their privileges have to be combined with regulations for the common good. The English Act was by comparison a simple proposal, though, as has been said, it will probably lead to more complete Cartellization between larger units. As a matter of organization, and especially for the sake of effective international agreements, sales may later be taken over by the English Cartels from their members. These Cartels are not likely to remain merely price and quota arrangements, as producers become larger and fewer. Then the system of arranging for the checks on policy by committees of investigation, standing outside the administration, will become less organic, and there is much advantage in the inclusiveness of the German system, which has fused the technical administration, the workers' share in control, the consumers' control, the Government supervision, and the process of appeal, so as to have made private capitalism work as close as possible to the ideals of nationalization.

# VII

## PROFIT AND MUTUAL TRADING

[Since this paper was published, the Committee appointed by the Chancellor of the Exchequer has reported, and the argument has been placed on a new basis. That Committee adopts the recommendation of the Income Tax Commission, that tax should be levied on that part of the trading surplus which is put to reserve; but for a new reason, namely, that the part of the surplus which is paid to the members as dividend is a trading expense of the Societies.

In the course of the debate on the Finance Bill, the Government explicitly abandoned the 'mutuality' argument for exemption, a notable step, in view of the place which that argument had so long held in official and other Memoranda.

The result would have been more acceptable if the taxation of the reserves only had been adopted as an administrative compromise, to save the trouble and expense of claims for repayment by individual members. As it is, a dividend paid to shareholders, to which only shareholders are entitled, becomes a trading expense, in my view a most arguable result. For even ordinary Joint Stock could not continue to attract capital if it did not offer the prospect of dividends.

The Co-operatives have not accepted the new solution and will aim at restoring the case for full exemption. My argument is that this is not sound, but that there is no theoretical alternative between the taxability of all the surplus and of none of it; though an administrative compromise may be made to save repayment claims.

It will make the position clear if I say that in my view Co-operation is a form of private enterprise, which has special rules as to shareholding, voting, and distribution of profit. The fact that wage-earners had so successfully established this kind of enterprise became embarrassing to those of them who adopted Socialist opinions. The Judgement of 1889 seemed to offer a way out of the dilemma, but a wrong one; and the decision of 1933 is hardly any better.]

THE question of the assessment to income tax of the co-operative dividend on purchases has historical, legal, and economic aspects. In the first place, what was the intention

of the Income Tax Acts, and the Industrial and Provident Societies Acts? Secondly, since it is a particular income tax that we have to consider, is an exemption of these dividends fair, in view of other profits which are taxed? Thirdly, what are the economics of mutual trade, when the Societies deal with a variety of products, and when they depend on an outside market of traders and employees?

A Committee of Inquiry on the subject has reported to the Chancellor of the Exchequer. It cannot be said to be a settled question in any of its aspects. The legal decision which determined the law in 1889, as well as the later case of 1927, applied to insurance societies, which are not in all respects representative of trading societies. The Inland Revenue, which had issued in 1901 and 1905 economic memoranda based on the decision of 1889, gave much less confident evidence to the Income Tax Commission of 1918, and was the appellant in the case of 1927, having endeavoured to levy tax on the surplus of mutual insurance. In a reservation to the Report of the Income Tax Commission, the economic validity of the application to co-operative dividend of the theory of mutual trading was definitely challenged by Messrs. Stamp and McClintock. The Commission as a whole reported that part of the surplus, the part put to reserve, should be taxed.

The importance of the question is not the amount of additional revenue which could be obtained by taxing the dividend. It has been estimated that Co-operative Societies do about 15 per cent. of the retail trade in their goods, but their members are not a sample of income taxpayers as a whole, and the estimate given to the Commission of 1918 was that at that time the gain to the revenue would be only about £500,000, and the whole revenue about £1,000,000. It was also agreed then that, the dividend being considered exempt, the Societies paid more tax than if other profits under Schedule D were strictly assessed. The present position is of the nature of a working compromise, which saves the revenue the expense and trouble of very numerous claims for repayment. The importance of

the question is indicated by the appointment of the recent Committee, and is firstly one of the attitude of private traders. There is considerable acrimony in the manner in which they have presented their case, particularly to the Departmental Committee of 1904–5. This is due partly to their opinion that, when all is said, an increasing *volume of trade* is not making its due contribution to income tax; partly to the conditions of price maintenance which are being applied to an increasing range of consumable goods, which conditions it is thought the societies do not observe, on the ground that the dividend on purchases is a concealed form of price-cutting. Again, it is important to consider what would happen to the revenue from income tax if co-operation extended to trades where the buyers would not be exempt because of the level of their individual incomes, and therefore what is happening in the transitional stage when co-operative and private trading co-exist. In a co-operative commonwealth, would income tax have to be applied to the whole surplus in defence of its productivity? Or would there have to be some other tax, which would also encroach on the trading surplus? What is the reflection on existing practice of the assumption of its indefinite extension? We already have the fact that E.P.D. had to be expressly levied during the War on the purchasers' dividend. It will be relevant later to note what has been done in Russia.

2. We may first consider the intention of the Acts, or if they show any intention. My view is that up to the end of the 'eighties, the law was supposed to make individuals liable, if they were not exempt on income grounds, to be assessed on the dividend. There are two sets of Acts to consider—the special Societies' Acts and the Income Tax Acts.

It does not seem to have been the intention of the Income Tax Acts to exempt societies generally because of their social purposes. In 1842 charitable bodies were exempted from charge as regards both investments and profits, and small Friendly Societies as regards investments only. But profits

under Schedule D were in the Acts of 1842 and 1853 taxable in respect of 'bodies politic, corporate or collegiate, companies, fraternities, fellowships, or societies of persons', who were to be charged with 'such the like duties as any person will be chargeable with', in respect of any 'Art, Mystery, Adventure, or concern carried on by them', as regards the 'profits or gains arising or accruing'. There is no legal mention of mutual trading, and no legal definition of profit.

But it was under the aegis of the Friendly Societies Acts that the Industrial and Provident Societies obtained their first exemption from direct assessment. In the first special Act of 1852, and in the Income Tax Act of 1853, they are regarded as a type of Friendly Society, being such Friendly Societies as attain their objects 'by carrying on or exercising *in common* any labour, trade, or handicraft', and their rules are to provide in the first instance 'for allowing payments to be made from time to time to all members of the Society in respect of any work or service which they may do or perform for or on behalf of the Society'. It appears to have been supposed that there was a considerable degree of mutuality in work between the members, such as did happen in the early days of co-operation. The Societies obtained in 1852 the exemption existing for Friendly Societies from direct taxation on investments, and when, in 1853, the Friendly Societies obtained exemption also as regards profits, this was by the implication of the words of the Act of 1852 extended to the Industrial and Provident Societies. Even in the second special Act of 1862, though they were no longer defined as carrying on their adventure *in common*, their exemption is not yet on their own merits, but is to be the same as that given to the Friendly Societies.

The assumptions as to the nature of the Industrial and Provident Societies changed in more than one way. While in the Act of 1876 they are still defined as carrying on any 'labour, trade, or handicraft', in the Act of 1893 they are simply Societies 'for carrying on any industries, businesses, or trades'

specified in their rules. Again, in the Acts of 1862, 1867, and 1876, the limitation of the interest of any member is £200 in the Society or its funds, but in 1893 this applies only to the shares; and, since minors could be members since 1876, a considerable extension of investment interest was possible for a household. It has never been a matter of their legal constitution that a dividend should be paid on purchases. As long as there was a limitation in the rate of share interest to 5 per cent., something else had to be done with the surplus over that, but this limitation was removed in 1862. They must now simply have a 'rule as to the application of profits'.

With these changes in their nature, there appears since the Act of 1867 the clause that the exemption from assessment is not to apply to members of the Societies if they are otherwise liable. In 1867 and 1876 the clause was in the form that it applied to members who received a portion of the profits, but the words in 1893 are that no member is 'exempt from any assessment under Schedules C and D', to which he would otherwise be liable. The then ruling Income Tax Act of 1853 said that Schedule D was 'in respect of the annual profits or gains arising or accruing to any person or persons whatever, from any kind of profits, or from any annuities, allowances, or stipends . . . and in respect of . . . other annual profits not changed by virtue of any of the other Schedules'. Since 1842 there has been a rule of the income tax that, in estimating taxable profits, 'no deduction shall be made on account of any annual interest or any annuity or other annual payment payable out of such profits or gains'.

What, then, is the significance of the insertion of this clause as to personal liability? The most likely interpretation is that the growth of the Societies, and the changes in their form, caused its insertion. Indeed, there is good evidence that there was a presumption of individual liability, but that for a time nothing was done about it, on the ground of low incomes. This appears in the following ways. First, by the evidence given by Mr. Holyoake to the Committee on Co-

operative Stores in 1879. He said that 'they always attempted to lay income tax upon us. If the Government chose, it could levy income tax on all Societies, but our members are too poor to be responsible for it.' And again: 'We have no exemption except from registration fees, and we seek no exemption from general taxation. Those who are exempted are protected by the charity of the State. We intend to pay our share of the common taxation; if we can't pay, it is our misfortune, not our fault.' The Society is exempt, but 'if any part of the profit comes to me, I should be bound to report it'. Secondly, by the fact that, while the Act of 1867 required the Societies to send lists to the revenue authorities of members to whom payments of a certain size were made, this clause was dropped in 1876, having been found useless. Thirdly, by what seems the decisive fact that the Surveyor of Taxes did assess the dividend of mutual trade in a very clear case, and succeeded in both the Queen's Bench Division and the Court of Appeal. In the House of Lords in 1889 the judgement was given against him. Of all the judges who heard this case, seven were for taxing and four against. This is the case by which the law has been interpreted.

The prevailing Act of 1893, in spite of this judgement, repeated the personal liability clause, as also did the Income Tax Act of 1918. Of course, under Schedule D, there was the possibility that profits on non-member trade and public contracts might have to be assessed, and it might be held that this explains the clause, there being something else than the dividend for it to refer to. It is also possible to interpret it as referring specially to Schedule C, since this is mentioned along with Schedule D, and there is no doubt of personal liability under C. Besides, not all Industrial and Provident Societies are co-operatives. Nevertheless, I think that the absence of an explicit exemption of dividends to purchasers, after the decision of 1889, maintained a doubt. That decision was in an insurance case, a not unimportant limitation.

3. This being the legal story, let us turn to the judicial

interpretations. It is on them that the present exemption rests, by extension from insurance to mutual trade generally. There are four steps in the interpretation. The details are appended. In the first (Padstow) case, it was decided that a mutual Society is for the profit or gain of its members, as profit is understood by the Companies' Act. In the second (Mersey) case, it was decided that a profit depends on how it is made, not on the use to which it is put. The Mersey Docks and Harbours Board was held liable on its profits, even if they were applied in reduction of the rates of Liverpool. 'The gains of a trade are that which is gained by the trading, for whatever purpose it is used. Whether it is gained for the benefit of a community or of individuals, whether the benefit is to be gained by individuals or by lightening public burdens, it is the same.' In this case, the profits were largely if not mainly derived from dues levied on persons who were not rate-payers; it was non-member trading. But the principle established is important, and was followed up later. In Last's case, it was decided that, if a company contracts to give to a group of its customers a definite share in the profits arising solely out of their custom (reserving another share to its own shareholders), the former share is taxable as well as the latter, and is not an expense to be deducted. If a trader gives, by coupons or otherwise, a bonus to customers, that is a deductible expense. But this case decided that it must be held possible to make such a contract as one for a *share in the profits*. This was an insurance case, the receivers of the share in profits being the holders of participating policies, and the company also did other insurance business on an ordinary basis. The beneficiaries were not as such members of the company, though their dividend arose entirely out of their own transactions with it. In one sense, there was not mutuality, in another there was a degree of mutuality. The rule of 1842, referred to above, and the Mersey case, were applied in this judgement, which is not always thought to be good law. But it is law that definite terms of division of profit are not an

expense to those who give the terms. It was not, therefore, surprising that in Styles' case, the Surveyor of Taxes charged to income tax the returns to participating policy-holders of the bonuses of an insurance society, of which they were the only members, and which had no shares. By continuity with the previous cases, the lower courts unanimously allowed the tax, but the House of Lords disallowed it. The doctrine of mutual trade was expounded by the Law Lords, and Last's case was distinguished by the fact of the non-membership of the beneficiaries. When, in 1921, another Surveyor of Taxes assessed the whole surplus of another insurance Society, which also had no shares and whose members were identical with the insured, on the ground that the surplus was all put to reserve, he was defeated in all three courts on the precedent of Styles' case.[1] But it is notable that he (that is, the Crown) took it to the Lords.

A layman can only comment on what seem to be imperfect applications of these insurance cases to trading as a whole. First, in insurance there is only one thing dealt in; as if a Co-operative Society sold nothing but tea. Then the purchaser would be receiving dividend strictly on his own purchases. And each person has only one transaction a year. The judgements appear to owe much of their force to the simplicity of the case. The fact of incorporation could then easily be, as it was, allowed to be immaterial to the 'return of the over-charge'. And secondly, the thing dealt in in insurance is practically beyond the control of the Society; it is the death-rate of the members. The economies of trading and management and employment are here represented only by the care with which the lives—that is, the members—are originally selected. One may doubt if this is a convincing precedent from which to argue to the turn-over of funds in trade, largely in purchases from non-member sellers, and through the extensive employment of what as such is non-member—that is, non-participating labour.

[1] SW. Lancs. Coal-owners' Association Case.

4. A word may be added on the attitude of the Inland Revenue. It issued Memoranda in 1901 and 1904, in which it confidently applied the legal decisions to the co-operative dividend. 'It would be absurd to argue that, merely because the Societies, instead of realizing their savings in the immediate form of low prices, choose to pay higher prices and to make a distribution of dividend, the members have added to their taxable income.' 'Their main object is not profit, but joint saving by members.' These views were accepted by the Departmental Committee of 1904–5. But the witness of the Revenue to the Income Tax Commission spoke rather differently. 'The question is one of law, and, as such, the Board are advised, in the light of decided cases, that it admits of no reasonable doubt.' The chief witness on the other side was pressed with the statement that he was asking the Commission 'to set aside the considered opinion of (among others) every official of the Board of Inland Revenue'; but the Board's witness went on to say that it was 'perfectly clear from the Styles case that . . . the Revenue took up the position that the so-called dividends were taxable and should be taxed, but the Courts took the other view'. 'That', he added, 'is the whole trouble that we have been faced with.'[1] It was after this that the Revenue again endeavoured to assess mutual profits in the Lancashire Coal-owners' case. E.P.D. had been expressly levied in 1915. The Income Tax Commission held the dividend to be non-taxable, except the amount put to reserve, and none of it is now taxed.

5. What we have to discuss as economists is the judgement of 1889, for the opinions then given cover the ground of the later contentions, which are often taken for granted.

First, there is the view that the dividend cannot be a profit, because the Societies can affect its amount by charging higher or lower prices. They can abolish it by selling at cost. It therefore represents the consumers' surplus of a method of doing business. Counsel for the appellant argued that 'this con-

[1] Qn. 18,157, 19,629, 19,683, 19,615.

sideration is conclusive as to its not being profit'. Lord Macnaghten argued that 'if a profit can be made in that way (by over-charging themselves) there is a field for profitable enterprise capable of indefinite extension', and Lord Herschell that 'some fallacy must surely lurk in an argument which would lead to such a conclusion'. This point was not directly taken in either of the dissenting judgements, a notable omission. Now I do not feel convinced by this line of argument. For it is impossible to say what would be the competitive reactions if the Societies were to sell at cost and without dividend. The private traders have in their evidence welcomed the suggestion, and said that they would know how to meet it.[1] If the market met the lower prices, the dividend would disappear, and there would be no reason for dealing with a co-operative rather than with any other shop. It does not then follow that the Societies could pay an economic interest on capital and clear their books.[2] The dividend is regarded, in fact, as an essential practice for the retention of custom. Nor is it certain that they could retain the custom by selling much above the market prices; members do not restrict their purchases to the Society to which they belong. Subject to the market conditions which determine its scope, the dividend is a trade practice or device, the effect of which is to create (together with the influence of the co-operative ideal) a measure of preferential buying, and so a greater volume of sales.

Secondly, and related to this, is the view of the return of an over-charge. The arguments gave force to this by taking very simple cases. Suppose, it was said, that five men contribute £10 each for a tour the expenses of which come to only £40; is the £10 which is returned a profit? If what is implied is mere purse-bearing by one member of the party, who cannot affect the costs of a predetermined journey, the answer would be no. But if, by having £50 in hand, he is able to risk

[1] Especially to the Departmental Committee of 1904–5.

[2] A golfer wins a hole with the help of a handicap stroke. It does not follow that he would have halved it without the stroke. The stroke affected the play.

adventures which turn out fortunately, so that the whole cost is *then* only £40, it is not so clear; there has been a larger real income than in the former case. The full contribution was necessary to the enterprise and its result. I have already pointed out that insurance was not the best of precedents for a generalization; and Lord Watson's remarks were coloured by their application to insurance. He said: 'When a number of individuals contribute funds for a common purpose, such as the payment to some or all of them on the occurrence of events certain (n.b.) or uncertain, and stipulate that their contributions, so far as not required for that purpose, shall be repaid to them, I cannot conceive why they should be regarded as traders, or why the contributions returned to them should be regarded as profits.' I submit that we are not dealing with so simple an operation as putting down a shilling for a tenpenny article, and getting the change quarterly in a lump sum. It is by trading with shillings that the tenpenny cost is made possible. The *ex post facto* argument was met by Lord Halsbury as follows: 'If it were true that each individual did only subscribe what was supposed to be necessary to accomplish the desired object, and that either miscalculation or something else *at the time of the original subscription* made that subscription excessive, and that the individual subscriber got back his excessive subscription and no more, or only such a sum as would make up the difference between his actual and what I will call his proper subscription, I could follow the argument. But I do not so understand the facts. The associated adventurers get their original subscriptions and something more; . . . they get their proportionate share of the good trading or fortunate adventure which has taken place during the year.' In other words, as I understand it, the risks against which the insured enjoyed in the interim the security of insurance were the proper market risks, and they could not have enjoyed *that* security for lower premiums than they paid. The unknowns at the time of subscription cannot, on the analogy of the 'change' in a money payment, be treated later

as if they had been knowns. The subscribers were not over-charged for their security, but made a profit in the only way in which life insurance ever does make a profit, by the luck of the death-rate, if the management was competent in selecting the subscribers. Any one who invests £5,000 for an expected rate of interest of 4 per cent., and realizes 5 per cent., may regard the transaction as having given him the expected income for £4,000; but the way in which he looks at it does not alter the nature of the gain. He might also say that the transaction had saved him his rent. Any extra profit can, after the event, be related to the original charge as a virtual deduction. But it does not follow that, if every investor in this instance had invested only four-fifths of what he did invest, there would have been an extra profit to distribute. In the same way, the co-operative market prices created the funds whose turnover was needed for the scale of the enterprise, and for the employment of labour and management of adequate efficiency. The 'return of over-charge' appears to me to be an *arbitrary* account of the facts.

This may be looked at also in the light of a distinction of old standing in the theory of taxation, between the basis, the source, and the application of resources. A tax based on income may come out of capital and be applied to either. The co-operative dividend is based on purchase prices, but it may be due to costs, and it may be applied in various ways. It need not be considered as applied to the original prices as a deduction. Suppose that it were distributed in the form of family allowances, so much for an adult and so much for a child. Its basis and source would be the same, but it would lose its *reference* to the prices. Would it then be possible to view it in the light of the over-charge idea? We are in the habit of regarding a dividend as a proportion of something, and if not of capital, then of prices; but need it be considered as anything but a realized sum? We need not apply it to its basis at all.

Thirdly, there is the question of mutuality. This is not to

be taken as that *individual* mutuality which means that the receiver of dividend relates it to his price as a deduction. Nor does it seem to be quite relevant to apply the maxim that 'a man cannot trade with himself' to a Society of persons who deal entirely with each other; such a Society would, it is true, have no 'in-come' from outside, and looked at as a whole it would be called entirely mutual. It is not Societies that are taxable, but individuals; to cut out the individual relations is to cut out the problem. Again, there are accidental aspects of mutuality which do not theoretically matter, such as common locality, nationality, or social class.

The question of *motive* must also be taken out of the meaning of mutuality. Three of the Law Lords made this a reinforcing idea. In the conditions of the dividend, the members 'cannot be regarded as carrying on a trade or vocation *for the purpose of* earning profit'. Two of them went further, and held that a mutual body did not do any trade. This interpretation had to be rejected in a later judgement, when Corporation Profits Tax was levied.[1] Mutuality must not be given any special savour; and the law does not exempt good motives, if a profit is made. A Bible Society is taxable on its profits from the sale of hymn-books. It is frequently held that the aim of co-operation is to create saving and thrift, but a person can save allowances, or profits, or anything else.

When formal association subject to law and regulations is necessary to any such enterprise, the individual who is both member and customer cannot claim exemption from profit-making on the ground that he 'cannot trade with himself', unless he could escape other obligations on the ground that he cannot make a contract with or owe a debt to himself.

The Law Lords held that the identity of members and customers created mutuality, and that therefore Styles' case was different from Last's case. It was different in that aspect of mutuality. But it was similar in another aspect of mutuality —namely, that the insured persons were associated together as

[1] Cornish Mutual Assurance Co. (1926).

a special group with a separate account, and that by their number they made possible the gain to each in relation to the law of averages. This is what corresponds to the association of co-operators as individuals to purchase from the same shop. It is the special factor of goodwill, and it separately contributes to the gain of the organization.

It appears that the English co-operative societies make about twice the profit on turn-over of ordinary retail trade. Mr. Neal thinks that the ordinary margin for a progressive business is about 4 per cent., and this is verified by Mr. Dobbs, who gives a rate varying for different trades between 3 and 6 per cent.[1] With the dividend, the co-operatives pay, according to the returns, about 10 per cent. They sell at market prices. Their average shop has ten times the turnover of the average independent shop, and twice that of the chain-store unit.[2] Unless their average shop requires five times the capitalization of the latter, which is very unlikely, they must have some special source of profit to account for the difference. This is the goodwill which comes from the more or less implicit association of the members as purchasers, a special aspect of mutuality, which lessens especially the cost of advertisement.[3]

We cannot put this extra gain aside as not profit, on the ground that it does not obtain in any ordinary company. An extra gain is to be expected, due to the efforts and sacrifices of the associated members, who deliberately do not buy elsewhere. Professor Pigou put it to a witness before the Income Tax Commission that the interest on share capital and expenses of management of an ordinary firm are fully allowed for in co-operative share interest and expenses of management, and were there to tax if there were no other surplus; so that, if co-operation extended over the whole of industry,

[1] Neal, *Retailing and the Public*, p. 124; Braithwaite and Dobbs, *Distribution of Consumable Goods*, p. 270.

[2] Dobbs, op. cit., p. 238.

[3] Mr. Neal gives figures to show that a cash-trading policy would save at least 5 per cent. of the gross margin, which is about the difference shown by the above data (10 per cent. less 4). Op. cit., p. 123.

'the profit left to tax would be exactly the same as it is at present, because dividend is something over and above what the ordinary company calls profit'.[1] I think that if the dividend comes from goodwill, an ordinary company would call it profit; if it is a taxable profit, there would be more to tax if co-operation spread, because the selling would have more reliable markets.

This degree of mutuality may exist, and cause profit, without the other mutuality which is due to the identity of members and customers. If persons are associated as customers, they may, as in Last's case, receive the profit of that association by contract with other persons who do the management, in which case they will not receive the whole of the profit; or they may do their own management, as in Styles' case, or that of a trading co-operative Society. But the question how the management is done does not affect the nature of the gain which arises from the purchasers' mutuality. In Last's and Styles' cases that was the same. And that is the question of the special dividend. This question was not dissolved by reference to the shareholder-purchaser mutuality, for it did not depend on that. Last's case showed that it did not. It separated the two meanings of mutuality. Indeed, Lord Bramwell, who supported the Styles judgement, had pointed out in Last's case that, in order to escape liability, 'as far as insurance companies are concerned, all they will have to do will be to alter their language'—and a profit will disappear! Not for economics.

The meaning of mutuality has not really been made clear, and the Law Lords were content to separate Styles' case formally from Last's, as a matter of the management of the funds. They did not explain why this separation made a difference to the meaning of profit. They tended to move over in their arguments to what is quite different, the over-charge theory. If my argument is right, the judgement in Last's case was good economics, and the maxim of the Mersey case

[1] Qn. 18,632–7.

that a profit depends on how it is made, which Last's case applied, retains its authority.[1]

There is no presumption in dealing thus as economists with the legal decisions. It has been pointed out that a majority of all the judges who heard Styles' case were for the tax. In 1927 the Crown again took the question to the House of Lords, and claimed tax on the whole surplus of another mutual assurance Society which had no shares and no outside trade.[2] It was possible for Lord Halsbury, as Lord Chancellor, to say in Styles' case that as regards the profit-making he could not see any difference from Last's case. The Inland Revenue witness to the Income Tax Commission, pressed as to the definition of mutual trade, said it was 'something between trading with oneself and trading with other people', and that a profit depended on how it was made 'except in mutual trade'. These uncertainties justify economic argument on the judgements.

Fourthly, there is another consideration which arises out of the actual administration of co-operative Societies. They are free to decide on the application of their whole profit. As a matter of custom, they pay usually 5 per cent. on share capital, and the rest in proportion to the purchases. But they could pay only 2 per cent. on their shares, and so increase the dividend. It is therefore in their own discretion to say whether a part of their whole profit is taxable or not, so long as individuals are liable on share interest only. It is difficult to reconcile this discretion with any principle of taxation, and it would be an important resource if co-operation extended to trade between other than working-class customers.

Fifthly, the view that an organization can only make real profit out of dealings with non-members cannot be limited to the idea of non-member *purchasers*. When the organization is one which employs a great deal of labour which, as such, does

[1] Since this was written, the new volume of Tax Cases carries the matter farther by the remarkable decision in *Municipal Mutual Insurance Ltd.* v. *Hills*. This is appended, with comment on its bearing.

[2] SW. Lancs. Coal-owners' Association.

not participate in dividends, argument is possible that on this ground the gains are profits.

Sixthly, there are two objections to the idea that the dividend can be conceived as a taxable profit, which go together. One is, that it is absurd to regard a shop as a place where people make money; a shop is a place where they spend money made elsewhere. The other, urged to me by Professor Cannan, that a new category of income would be created, to be called co-operative dividend. The answer to both is the same, that the dividend as a whole is shareholders' income, whatever the further arrangement by which they divide it among themselves. Nor is it a *reductio ad absurdum* of my argument that the holder of a single £1 share, whose dividend amounts to £10 in a year, is making 1,000 per cent. on the investment. His dividend is simply a sum of money, £10; it will not become £20 if he takes another share. These are mere details of a particular method of distribution.

Lastly, I return to what was called in the beginning the *volume of trade* argument. If co-operation were to extend generally, would the revenue from income tax not be seriously affected, so long as the purchasers' dividend was exempt? Large amounts of profit would be turned into mutual gains, by a different basis of distribution. But a change of basis of distribution is irrelevant to the real causation of profit. Yet on the theory of mutuality as established by the judgements, this change will affect the amount taxable. This was the point urged in some questions put to the co-operative witnesses before the Commission by Mrs. Knowles,[1] and answered by the statement that 'our purpose is to do away with profit'. It is plain that, if this went far, either a new tax would have to be imposed, like the Corporation Profits tax or a turnover tax, or income tax would have definitely to be applied by statute to the surpluses going to members. The private traders always urge that a 'volume of trade' is escaping taxation, but their objection only comes to anything if co-operation spreads far

[1] Qn. 18,871–3.

beyond its present boundaries. Reflection on what is happening in the interim may be obtained from the example of Russia. There the co-operatives are the public system of distribution, covering most of the field of distribution of consumable goods, and with this extension of their bounds it is found necessary to levy on their profits both a turnover tax and an income tax of 10 per cent.[1]

The achievements of working-class co-operation are in its democratic system of government and its wider distribution of profit. While I do not think it is valid to deny the fact of profit, that movement need not be concerned over the argument presented in this paper. Its members will be exempt on income grounds to such an extent that the Revenue will prefer some compromise arrangement, rather than be faced with a multitude of claims for repayment. A compounding rate of a few pence in the pound on the dividend would mean very little, since other adjustments of the present taxation under other Schedules would be necessary. It would be as well to give private traders no reason for the present acrimony. It follows, too, from my argument that the idea is mistaken which regards the dividend as a concealed form of price-cutting; while the 'return of over-charge' or 'rebate' theory does give colour to this idea. But, apart from the point of theory, there is the possibility of further development of the co-operative method. The Rochdale Pioneers did not intend to show how capitalists of greater personal resources could escape from income tax on profits 'by altering their language'.

## SUMMARY OF CASES

*Padstow Assurance Association.*

By the rules of a mutual marine insurance association, it was provided that all persons who effected an insurance should be members. In case of the total loss of a vessel, the members were to pay the loser the amount for which he had insured it, rateably. . . .

[1] Haensel, *Economic Policy of Soviet Russia*, p. 142.

*Held*, that although the business of the association had not for its object the acquisition of gain by the association, it had for its object the acquisition of gain by the individual members.

(*Chancery Cases*, vol. 20, 1882.)

*Mersey Docks and Harbour Board* v. *Lucas* (*Surveyor of Taxes*).

A corporation was constituted for the management of the Mersey Dock estate by an Act which provided that the moneys to be received by them from their dock dues and other sources of revenue should be applied in payment of expenses, interest upon debts, construction of works, and management of the estate; and that the surplus should be applied to a sinking fund for the extinction of the principal of the debts; and that after such extinction the rates should be reduced; and that except as aforesaid the moneys should not be applied for any other purpose whatsoever:—

*Held*, that under the Income Tax Acts the corporation was liable to income tax in respect of the surplus, though applicable to the above-named purpose only.

(*Appeal Cases*, vol. 8, 1882.)

*Last* (*Surveyor of Taxes*) v. *London Assurance Corporation*.

A life insurance company issued 'participating policies' at an increased premium, according to the terms of which at the end of each quinquennial period the 'gross profit' of such policies were thus dealt with: two-thirds were returned by way of bonus or abatement of premiums to the holders of such policies then in force; the remaining third went to the company who bore the whole expenses of the business, the portion remaining after payment of expenses constituting the only profit available for distribution among the shareholders:—

*Held*, reversing the decision of the Court of Appeal, that the two-thirds returned to the policy-holders were 'annual profits or gains' and assessable to income tax.

(*Appeal Cases*, vol. 10, 1885.)

*New York Life Insurance Company* v. *Styles* (*Surveyor of Taxes*).

A life insurance company had no shares or shareholders. The only members were the holders of participating policies, each of whom was entitled to a share of the assets and liable to all losses. A calculation was made by the company of the probable death rate among the members and of the probable expenses and other

liabilities, and the amount claimed for premiums from members was commensurate therewith. An account was annually taken, and the greater part of the surplus of such premiums over expenditure referable to these policies was returned to the policy-holders as bonus, either by addition to the sums insured or in reduction of future premiums. The remainder of the surplus was carried forward as funds in hand to the credit of the general body of the members. It being admitted that the income derived by the company from investments, and from all transactions with persons not members, was assessable to income tax:—

*Held*, by four Law Lords, that no part of the premium income received under participating policies was liable to be assessed to income tax as profit or gains under Schedule D; and that *Last* v. *London Assurance Corporation* was distinguishable, the income in that case being derived from transactions with persons not members, and not (as in the present case) from mutual insurances between members only:—

*Held*, by the Lord Chancellor and one other Law Lord, that Last's case governed the present case, and that the surplus returned or credited to members was liable to income tax.

(*Appeal Cases*, vol. 14, 1889.)

*Jones* v. *SW. Lancs. Coal-owners' Association, Ltd.*

A company limited by guarantee had for its sole effective purpose the indemnity of its members in respect of fatal accidents to workmen. It was a purely mutual concern. A fund was to be established by means of ordinary calls upon the members. At the end of each year the surplus of the fund was to be carried to a reserve fund.

*Held*, that the surplus did not constitute profit liable to income tax.

Styles' case applied.

(*Appeal Cases*, 1927.)

*Municipal Mutual Insurance Ltd. v. Hills* (*Inspector of Taxes*).

This Company had no shares. Its effective control was in the hands of the fire-policy holders, who alone were entitled, in case of a winding-up, to the surplus assets. The Company undertook other forms of insurance. The surplus was applied to cumulative reductions of fire premiums, but not of other premiums. It was admitted that the surplus of the fire-policy business, being mutual,

was not liable to tax, and that the surplus derived from other insurance with non-members was liable.

*Held*, that the surplus on other insurance than fire, done with fire-policy holders (members), did not arise from mutual insurance, and was liable.

(*Tax Cases*, 1932.)

(*Mutatis mutandis*, if the members of a co-operative society were defined as buyers of sugar, and the society also sold other things, but the whole surplus were divided on sugar alone, then the surplus derived from trading with the members on tea and other things would be taxable; because *qua* buyers of tea they were not members.

This seems to reduce the question to a bare formalism which economists cannot accept.)

# APPENDIX TO ESSAYS III AND IV

## TABLE A

### *Shipwrecks 1871–1913*

(Seven-year moving index)

| | | | | | |
|---|---|---|---|---|---|
| 1874 | 107 | 1887 | 91 | 1900 | 97 |
| 5 | 91 | 8 | 100 | 1 | 93 |
| 6 | 97 | 9 | 85 | 2 | 93 |
| 7 | 97 | 90 | 104 | 3 | 118 |
| 8 | 88 | 1 | 115 | 4 | 93 |
| 9 | 85 | 2 | 83 | 5 | 95 |
| 80 | 111 | 3 | 104 | 6 | 104 |
| 1 | 131 | 4 | 109 | 7 | 93 |
| 2 | 100 | 5 | 102 | 8 | 111 |
| 3 | 108 | 6 | 93 | 9 | 93 |
| 4 | 90 | 7 | 106 | 10 | 103 |
| 5 | 89 | 8 | 99 | | |
| 6 | 110 | 9 | 100 | | |

## TABLE B

### *British Emigrants, 1870–1913*

(Seven-year moving index)

| | | | | | |
|---|---|---|---|---|---|
| 1873 | 124 | 1886 | 90 | 1899 | 89 |
| 4 | 117 | 7 | 115 | 1900 | 95 |
| 5 | 90 | 8 | 116 | 1 | 88 |
| 6 | 73 | 9 | 105 | 2 | 97 |
| 7 | 64 | 90 | 91 | 3 | 111 |
| 8 | 72 | 1 | 99 | 4 | 100 |
| 9 | 89 | 2 | 101 | 5 | 92 |
| 80 | 111 | 3 | 108 | 6 | 110 |
| 1 | 107 | 4 | 85 | 7 | 126 |
| 2 | 116 | 5 | 107 | 8 | 77 |
| 3 | 128 | 6 | 99 | 9 | 77 |
| 4 | 94 | 7 | 92 | 1910 | 102 |
| 5 | 79 | 8 | 88 | | |

(*Statistical Abstract.*)

## TABLE C

### *New Joint-Stock Companies*

(Seven-year moving index)

| | | | | | | |
|---|---|---|---|---|---|---|
| 1860 | 89 | 1877 | 87 | 1894 | .. | 83 |
| 1 | 87 | 8 | 75 | 5 | .. | 101 |
| 2 | 79 | 9 | 86 | 6 | .. | 113 |
| 3 | 110 | 80 | 100 | 7 | .. | 115 |
| 4 | 142 | 1 | 120 | 8 | .. | 111 |
| 5 | 144 | 2 | 111 | 9 | .. | 108 |
| 6 | 105 | 3 | 104 | 1900 | .. | 109 |
| 7 | 70 | 4 | 88 | 1 | .. | 79 |
| 8 | 69 | 5 | 80 | 2 | .. | 94 |
| 9 | 72 | 6 | 95 | 3 | .. | 97 |
| 70 | 83 | 7 | 96 | 4 | .. | 90 |
| 1 | 95 | 8 | 111 | 5 | .. | 97 |
| 2 | 115 | 9 | 113 | 6 | .. | 100+ |
| 3 | 121 | 90 | 109 | 7 | .. | 99 |
| 4 | 117 | 1 | 99 | 8 | .. | 89 |
| 5 | 111 | 2 | 89 | 9 | .. | 104 |
| 6 | 91 | 3 | 79 | 10 | .. | 113 |

(*Company Statistics.*)

## TABLE D

## *Unemployment*

(Trade Union Corrected Percentage)

| | | | |
|---|---|---|---|
| 1860 | 1·85 | 1887 | 7·15 |
| 1 | 3·7 | 8 | 4·15 |
| 2 | 6·05 | 9 | 2·05 |
| 3 | 4·7 | 90 | 2·1 |
| 4 | 1·95 | 1 | 3·4 |
| 5 | 1·8 | 2 | 6·2 |
| 6 | 2·65 | 3 | 7·7 |
| 7 | 6·3 | 4 | 7·2 |
| 8 | 6·75 | 5 | 6·0 |
| 9 | 5·95 | 6 | 3·35 |
| 70 | 3·75 | 7 | 3·45 |
| 1 | 1·65 | 8 | 2·95 |
| 2 | 0·95 | 9 | 2·05 |
| 3 | 1·15 | 1900 | 2·45 |
| 4 | 1·6 | 1 | 3·35 |
| 5 | 2·2 | 2 | 4·2 |
| 6 | 3·4 | 3 | 5·0 |
| 7 | 4·4 | 4 | 6·4 |
| 8 | 6·25 | 5 | 5·25 |
| 9 | 10·7 | 6 | 3·7 |
| 80 | 5·25 | 7 | 3·95 |
| 1 | 3·55 | 8 | 8·65 |
| 2 | 2·35 | 9 | 8·7 |
| 3 | 2·6 | 10 | 5·1 |
| 4 | 7·15 | 1 | 3·05 |
| 5 | 8·55 | 2 | 3·15 |
| 6 | 9·55 | 3 | 2·1 |

## *Post War*

*A.* Trade Union Corrected Percentage

*B.* Insured Persons, Monthly Average

| | *A.* | *B.* | | *A.* | *B.* |
|---|---|---|---|---|---|
| 1921 | 15·55 | 16·6 | 1924 | 9·1 | 10·2 |
| 1922 | 17·2 | 14·1 | 1925 | 11·05 | 11·0 |
| 1923 | 12·5 | 11·5 | 1926 | 12·7 | 12·3 |

(*Labour Statistics.*)

TABLE E

*Seven-year Price Relatives*

| | S. | B.T. | Mean. | | S. | B.T. | Mean. |
|---|---|---|---|---|---|---|---|
| 1860 | 100·3 | .. | .. | 1886 | 94·9 | 94·0 | 94·4 |
| 1 | 99·3 | .. | .. | 7 | 95·4 | 94.8 | 95·1 |
| 2 | 100·9 | .. | .. | 8 | 99·0 | 98·7 | 98·8 |
| 3 | 101·7 | .. | .. | 9 | 102·6 | 101·5 | 102·0 |
| 4 | 103·5 | .. | .. | 90 | 102·9 | 101·2 | 102·0 |
| 5 | 99·4 | .. | .. | 1 | 103·9 | 105·5 | 104·7 |
| 6 | 100·8 | .. | .. | 2 | 99·8 | 101·3 | 100·0 |
| 7 | 99·9 | .. | .. | 3 | 102·1 | 100·4 | 101·2 |
| 8 | 99·6 | .. | .. | 4 | 96·7 | 97·7 | 97·2 |
| 9 | 97·4 | .. | .. | 5 | 96·9 | 96·8 | 96·8 |
| 70 | 94·2 | .. | .. | 6 | 95·3 | 95·1 | 95·2 |
| 1 | 97·9 | .. | .. | 7 | 95·4 | 97·3 | 96·3 |
| 2 | 107·2 | .. | .. | 8 | 97·0 | 100·2 | 98·6 |
| 3 | 109·6 | .. | .. | 9 | 101·5 | 98·3 | 99.9 |
| 4 | 101·0 | 103·2 | 102·1 | 1900 | 110·1 | 105·2 | 107·6 |
| 5 | 96·8 | 99·0 | 97·9 | 1 | 101·0 | 100·5 | 100·7 |
| 6 | 99·5 | 98·7 | 99·1 | 2 | 98·0 | 99.5 | 98·7 |
| 7 | 102·0 | 103·5 | 102·7 | 3 | 96·2 | 98·8 | 97·5 |
| 8 | 97·0 | 98·7 | 97·9 | 4 | 96·6 | 99·2 | 97·9 |
| 9 | 94·3 | 95·4 | 94·8 | 5 | 98·8 | 97·8 | 98·3 |
| 80 | 102·2 | 99·7 | 100·9 | 6 | 104·7 | 99·9 | 102·3 |
| 1 | 101·7 | 100·8 | 101·2 | 7 | 106·9 | 103·3 | 105·1 |
| 2 | 103·2 | 104·5 | 103·8 | 8 | 95·7 | 98·8 | 97·2 |
| 3 | 103·2 | 106·0 | 104·6 | 9 | 94·7 | 97·6 | 96·1 |
| 4 | 99·3 | 99·7 | 99·5 | 10 | 98·4 | 99·9 | 99·2 |
| 5 | 96·7 | 96·5 | 96·6 | | | | |

TABLE F

*Net price ratios* (p. 84)

| | | | | | |
|---|---|---|---|---|---|
| 1860 | 109 | 1878 | 86 | 1896 | 98 |
| 1 | 110 | 9 | 90 | 7 | 102 |
| 2 | 103 | 80 | 95 | 8 | 112 |
| 3 | 108 | 1 | 104 | 9 | 121 |
| 4 | 101 | 2 | 91 | 1900 | 113 |
| 5 | 100 | 3 | 88 | 1 | 107 |
| 6 | 93 | 4 | 84 | 2 | 88 |
| 7 | 98 | 5 | 79 | 3 | 99 |
| 8 | 95 | 6 | 86 | 4 | 104 |
| 9 | 95·5 | 7 | 95 | 5 | 112 |
| 70 | 101 | 8 | 104 | 6 | 115 |
| 1 | 107 | 9 | 107 | 7 | 106 |
| 2 | 117 | 90 | 104 | 8 | 98 |
| 3 | 107 | 1 | 94·5 | 9 | 93 |
| 4 | 89 | 2 | 94 | 10 | 110 |
| 5 | 81 | 3 | 84 | 11 | 117 |
| 6 | 89 | 4 | 91 | 12 | 110 |
| 7 | 90 | 5 | 86 | | |

## TABLE G

### *Joint-Stock Company Liquidations (England and Wales)*

| | *A* | *B* | *C* | *D* | *E* | *F* | *G* | *H* |
|---|---|---|---|---|---|---|---|---|
| 1865 | 63 | 27 | 7 | | 119 | 164 | .. | .. |
| 6 | 108 | 47 | 15 | | 183 | 277 | .. | .. |
| 7 | 110 | 74 | 15 | | 158 | 290 | .. | .. |
| 8 | 93 | 46 | 7 | | 118 | 213 | 93 | 102 |
| 9 | 68 | 72 | 6 | | 129 | 226 | 96 | 101 |
| 70 | 101 | 38 | 5 | | 148 | 237 | 101 | 103 |
| 1 | 63 | 44 | 7 | | 135 | 197 | 82 | 80 |
| 2 | 57 | 47 | 8 | | 155 | 208 | 78 | 70 |
| 3 | 75 | 58 | 17 | | 209 | 273 | 93 | 80 |
| 4 | 81 | 89 | 9 | | 237 | 328 | 106 | 94 |
| 5 | 138 | 110 | 9 | | 239 | 408 | 121 | 126 |
| 6 | 147 | 122 | 16 | | 199 | 401 | 108 | 118 |
| 7 | 119 | 109 | 21 | | 192 | 356 | 91 | 92 |
| 8 | 95 | 137 | 11 | | 236 | 390 | 97 | 90 |
| 9 | 121 | 190 | 13 | | 203 | 447 | 110 | 117 |
| 80 | 127 | 140 | 10 | | 195 | 397 | 95 | 99 |
| 1 | 126 | 143 | 27 | | 218 | 415 | 95 | 94 |
| 2 | 134 | 148 | 21 | | 236 | 440 | 99 | 96 |
| 3 | 147 | 152 | 31 | | 261 | 473 | 106 | 102 |
| 4 | 158 | 189 | 24 | | 219 | 493 | 107 | 115 |
| 5 | 117 | 172 | 16 | 11 | 242 | 451 | 96 | 95 |
| 6 | 110 | 183 | 35 | 7 | 248 | 459 | 95 | 95 |
| 7 | 129 | 199 | 25 | 14 | 267 | 506 | 101 | 103 |
| 8 | 124 | 167 | 67 | 18 | 292 | 486 | 93 | 91 |
| 9 | 132 | 176 | 105 | 15 | 309 | 514 | 91 | 88 |
| 90 | 138 | 223 | 94 | 18 | 358 | 599 | 98 | 94 |
| 1 | 119 | 245 | 73 | 46 | 396 | 628 | 97 | 90 |
| 2 | 117 | 367 | 122 | 29 | 414 | 760 | 111 | 112 |
| 3 | 139 | 405 | 87 | 29 | 369 | 790 | 109 | 121 |
| 4 | 114 | 391 | 77 | 26 | 385 | 761 | 98 | 108 |
| 5 | 90 | 374 | 116 | 22 | 423 | 746 | 87 | 92 |
| 6 | 86 | 331 | 194 | 69 | 563 | 793 | 87 | 80 |
| 7 | 108 | 378 | 279 | 51 | 747 | 984 | 100 | 89 |
| 8 | 125 | 499 | 290 | 92 | 825 | 1,174 | 112 | 109 |
| 9 | 108 | 507 | 285 | 104 | 806 | 1,153 | 103 | 101 |
| 1900 | 117 | 583 | 214 | 88 | 874 | 1,282 | 109 | 108 |
| 1 | 110 | 595 | 142 | 61 | 783 | 1,227 | 102 | 103 |
| 2 | 112 | 587 | 149 | 51 | 795 | 1,229 | 101 | 99 |
| 3 | 83 | 593 | 143 | 36 | 746 | 1,174 | 95 | 93 |
| 4 | 98 | 673 | 105 | 29 | 669 | 1,217 | 97 | 102 |
| 5 | 89 | 682 | 93 | 36 | 759 | 1,277 | 97 | 96 |
| 6 | 116 | 636 | 101 | 59 | 772 | 1,266 | 94 | 90 |
| 7 | 108 | 766 | 129 | 22 | 783 | 1,396 | 101 | 100 |
| 8 | 126 | 955 | 95 | 26 | 850 | 1,647 | 115 | 120 |
| 9 | 146 | 743 | 134 | 39 | 800 | 1,423 | 97 | 96 |
| 10 | 135 | 791 | 92 | 68 | 812 | 1,468 | 98 | 98 |
| 11 | 160 | 835 | 99 | 46 | 842 | 1,557 | .. | .. |
| 12 | 151 | 790 | 93 | 59 | 893 | 1,537 | .. | .. |
| 13 | 137 | 761 | 95 | 49 | 849 | 1,464 | .. | .. |

A. Compulsory (Order of Court). B. Unable to meet Liabilities.
C. D. Reconstruction, Amalgamation. E. Other voluntary.
F. $A+B+2/3\ E$. G. *F* per cent. of 7-year moving average.
H. $(A+B)$ per cent. of 7-year moving average.
(A. *Judicial Statistics.* B–E. *London Gazette.*)

## TABLE H

### *Rates of Liquidation (England and Wales)*

| | *A* | *B* | *C* | *A′* | *B′* |
|---|---|---|---|---|---|
| 1884 | 6·4 | 4·5 | .. | .. | .. |
| 5 | 5·5 | 3·6 | .. | .. | .. |
| 6 | 5·5 | 3·5 | .. | .. | .. |
| 7 | 5·5 | 3·6 | .. | 101 | 105 |
| 8 | 5·1 | 3·0 | .. | 98 | 95 |
| 9 | 4·9 | 2·8 | .. | 95 | 89 |
| 90 | 5·1 | 3·0 | .. | 97 | 95 |
| 1 | 4·7 | 2·7 | .. | 94 | 88 |
| 2 | 5·3 | 3·4 | 4·7 | 109 | 112 |
| 3 | 5·1 | 3·5 | 4·4 | 107 | 119 |
| 4 | 4·7 | 3·1 | 4·5 | 101 | 109 |
| 5 | 4·3 | 2·7 | 3·4 | 91+ | 94·5 |
| 6 | 4·2 | 2·2 | 4·4 | 91− | 81 |
| 7 | 4·2 | 2·3 | 4·6 | 91+ | 88 |
| 8 | 5·2 | 2·8 | 5·3 | 114 | 111 |
| 9 | 4·7 | 2·5 | 5·6 | 104 | 101 |
| 1900 | 4·9 | 2·7 | 4·8 | 107 | 110 |
| 1 | 4·4 | 2·5 | 3·9 | 101 | 102 |
| 2 | 4·1 | 2·3 | 3·9 | 99 | 97 |
| 3 | 3·7 | 2·1 | 4·0 | 93 | 91 |
| 4 | 3·6 | 2·3 | 3·2 | 95 | 103 |
| 5 | 3·6 | 2·2 | 2·8 | 97 | 97 |
| 6 | 3·4 | 2·0 | 2·9 | 94 | 90 |
| 7 | 3·6 | 2·3 | 2·6 | 101 | 103 |
| 8 | 4·1 | 2·7 | 3·2 | 117 | 124 |
| 9 | 3·4 | 2·1 | 3·4 | 100 | 99 |
| 10 | 3·1 | 2·0 | 2·4 | 94 | 97 |
| 11 | 3·2 | 2·0 | 2·2 | .. | .. |
| 12 | 3·0 | 1·8 | 2·6 | .. | .. |
| 13 | 2·7 | 1·6 | 2·0 | .. | .. |

A. Index $F$ of Table G as per cent. of companies on register at midyear.
B. Index $(A+B)$ of Table G per cent. of companies on register at midyear.
C. Paid-up capital involved in *all* liquidations as per cent. of paid-up capital of operating companies at midyear.
A′. B′. Seven-year moving indices.

(*Annual Company Reports.*)

## TABLE K

### *England and Wales*

### *Liquidations (general index) plus bankruptcies*

(Per 100,000 mean population)

| | | | | | |
|---|---|---|---|---|---|
| 1885 | 17·6 | | 1900 | 17·6 | |
| 6 | 16·7 | | 1 | 16·7 | |
| 7 | 19·3 | 18·0 | 2 | 16·4 | 16·8 |
| 8 | 18·9 | | 3 | 16·3 | |
| 9 | 17·7 | | 4 | 17·1 | |
| 90 | 16·0 | | 5 | 17·7 | |
| 1 | 16·6 | | 6 | 16·6 | |
| 2 | 18·3 | 17·7 | 7 | 15·8 | 16·5 |
| 3 | 19·1 | | 8 | 16·9 | |
| 4 | 18·3 | | 9 | 15·4 | |
| 5 | 16·9 | | 10 | 14·9 | |
| 6 | 16·0 | | 11 | 14·6 | |
| 7 | 16·2 | 16·6 | 12 | 13·9 | 14·1 |
| 8 | 17·3 | | 13 | 13·0 | |
| 9 | 16·4 | | | | |

## TABLE L

### *United States*

A. Commercial failures per 10,000 businesses
B. Defaulted indebtedness per $100,000 of bank clearings

| | *A* | *B* | | *A* | *B* |
|---|---|---|---|---|---|
| 1866 | 94 | | 1890 | 98 | 312 |
| 7 | 133 | | 1 | 107 | 335 |
| 8 | 93 | | 2 | 89 | 183 |
| 9 | 79 | | 3 | 128 | 639 |
| 70 | 83 | | 4 | 125 | 379 |
| 1 | 61 | | 5 | 109 | 325 |
| 2 | 77 | | 6 | 131 | 437 |
| 3 | 92 | | 7 | 126 | 269 |
| 4 | 97 | | 8 | 110 | 189 |
| 5 | 121 | | 9 | 81 | 97 |
| 6 | 133 | | 1900 | 91 | 161 |
| 7 | 136 | | 1 | 90 | 95 |
| 8 | 155 | | 2 | 93 | 99 |
| 9 | 96 | | 3 | 93 | 142 |
| 80 | 63 | 129 | 4 | 92 | 128 |
| 1 | 71 | 126 | 5 | 84 | 71 |
| 2 | 83 | 167 | 6 | 76 | 78 |
| 3 | 106 | 334 | 7 | 83 | 136 |
| 4 | 122 | 515 | 8 | 108 | 168 |
| 5 | 116 | 306 | 9 | 80 | 92 |
| 6 | 101 | 234 | 10 | 83 | 123 |
| 7 | 91 | 327 | 11 | 88 | 121 |
| 8 | 103 | 250 | 12 | 99 | 103 |
| 9 | 104 | 265 | 13 | 99 | 162 |

(Dun's *Record of Insolvencies.*)